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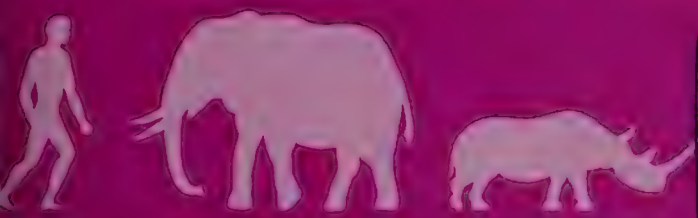

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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Notices

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles.* At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 53, part 4 (published on 20 December 1996). Under Article 80 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

(1) *Androctonus leptochelys* Ehrenberg, 1828 (currently *Buthacus leptochelys*; Arachnida, Scorpiones): proposed conservation of the specific name. (Case 3030). V. Fet & M.E. Braunwalder.

(2) *Paruroctonus* Werner, 1934 (Arachnida, Scorpiones): proposed conservation. (Case 3031). W.D. Sissom, V. Fet & M.E. Braunwalder.

(3) *Myoxus japonicus* Schinz, 1845 (currently *Glirulus japonicus*; Mammalia, Rodentia): proposed conservation as the correct original spelling of the specific name. (Case 3033). C. Smeenk & Y. Kaneko.

(4) *Waagenoconcha* Chao, 1927 and *Gruntoconcha* Angiolini, 1995 (Brachiopoda): proposed conservation. (Case 3034). C.H.C. Brunton.

(5) *Trachelocerca* Ehrenberg (Ciliophora): proposed conservation of authorship as Ehrenberg (1840) and fixation of *Vibrio sagitta* Müller, 1786 as the type species. (Case 3035). J.O. Corliss & W. Foissner.

(6) *Haliotis elegans* Philippi, 1844 and *H. clathrata* Reeve, 1864 (Mollusca, Gastropoda): proposed conservation of the specific names. (Case 3036). D.L. Geiger & K.A. Stewart.

(d) *Ruling of the Commission.* Each Opinion published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

The International Commission on Zoological Nomenclature and its publications

The International Commission on Zoological Nomenclature was established in 1895 by the third International Congress of Zoology, and at present consists of 26 zoologists from 19 countries whose interests cover most of the principal divisions (including palaeontology) of the animal kingdom. The Commission is under the auspices of the International Union of Biological Sciences (IUBS), and members are elected by secret ballot of zoologists attending General Assemblies of IUBS or Congresses of its associated bodies such as the International Congress of Systematic and Evolutionary Biology (ICSEB). Casual vacancies may be filled between Congresses. Nominations for membership may be sent to the Commission Secretariat at any time.

The International Code of Zoological Nomenclature has one fundamental aim, which is to provide 'the maximum universality and continuity in the scientific names of animals compatible with the freedom of scientists to classify all animals according to taxonomic judgements'. The latest (Third) Edition was published in 1985 by the International Trust for Zoological Nomenclature, acting on behalf of the Commission; a Fourth Edition is in course of preparation and publication is planned for late 1997.

Observance of the rules in the *Code* enables a biologist to arrive at the valid name for any animal taxon between and including the ranks of subspecies and superfamily. Its provisions can be waived or modified in their application to a particular case when strict adherence would cause confusion; however, this must never be done by an individual but only by the Commission, acting on behalf of all zoologists. The Commission takes such action in response to proposals submitted to it; applications should follow the instructions in the *Bulletin*, and assistance will be given by the Secretariat.

The Bulletin of Zoological Nomenclature is published four times each year. It contains applications for Commission action, as described above; their publication is an invitation for any person to contribute comments or counter-suggestions, which may also be published. The Commission makes a ruling (called an Opinion) on a case only after a suitable period for comments. All Opinions are published in the *Bulletin*, which also contains articles and notes relevant to zoological nomenclature; such contributions are invited and should be sent to the Secretariat.

The Commission's rulings are summarised in *The Official Lists and Indexes of Names and Works in Zoology*; a single volume covering the period 1895–1985 was published in 1987, and a free supplement covering 1986–1990 was issued in 1991. Copies may be obtained from the Secretariat.

In addition to dealing with applications and other formal matters, the Commission's Secretariat is willing to help with advice on any question which may have nomenclatural (as distinct from purely taxonomic) implications.

The International Trust for Zoological Nomenclature is a charity (not-for-profit company) registered in the U.K. The Secretariat of the Commission is based in London, and the Trust is established there to handle the financial affairs of the Commission. The sale of publications covers less than half of the costs of the service given to zoology by the Commission. Support is given by academies, research

councils, institutions and societies from a number of countries, and also by individuals; despite this assistance the level of income remains a severe restraint. Donations to the Trust are gratefully received and attention is drawn to the tax advantage of legacies. For a more detailed discussion of the Commission and its activities see BZN **48**: 295–299 (December 1991). A Centenary History of the Commission — *Towards Stability in the Names of Animals* — was published in 1995 and is obtainable from the Secretariat.

Addresses of members of the Commission

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Fourth Edition of the International Code of Zoological Nomenclature

Following the receipt of more than 500 comments by zoologists and their consideration by the Editorial Committee, the forthcoming new edition of the Code was discussed by the Commission and the Section of Zoological Nomenclature of IUBS at meetings in Budapest in August 1996 (see BZN **53**: 145–146). The main conclusions of these meetings have been summarised in the December 1996 issue of the *Bulletin* (BZN **53**: 235–237 and 240–243).

Subject to the text being formally approved by the Commission and ratified by the Executive Committee of the International Union of Biological Sciences (IUBS), publication of the Fourth Edition is planned for late 1997 and its provisions will come into effect on 1 January 1999.

The European Association for Zoological Nomenclature

The European Association for Zoological Nomenclature (EAZN) was set up in 1992 to facilitate liaison between European zoologists and the Commission, and to provide support for the Commission. An Inaugural Council under the Presidency of Dr V. Mahnert (Switzerland) and with Dr E. Macpherson (Spain) as Secretary and Dr M.A. Alonso-Zarazaga (Spain) as Treasurer launched EAZN; their dedicated work is gratefully acknowledged.

A new Council is now being established with Dr W. Böhme (Museum Alexander Koenig, Bonn, Germany) as President and Dr Ch. Kropf (Natural History Museum, Berne, Switzerland) as Secretary.

The aims of the EAZN can be set out as follows:

(1) to facilitate the work of the Commission by providing funds;
(2) to promote liaison between the zoological community and the Commission;
(3) to promote and compile works relevant to zoological nomenclature;
(4) to disseminate information on zoological nomenclature to those institutions, organisations and individuals requesting it.

Europe has a great and long tradition in zoological systematics, and European scientists generate much of the Commission's important work. All European zoologists, and those who use scientific names of animals, are invited to support the Commission by joining EAZN. The annual membership is set at the equivalent of £20 for individuals and £40 for institutions. Members will receive a Newsletter which will be issued at least annually, and more often if required. They also benefit from considerable reductions in the price of the Commission's publications — the *Code*, the *Official Lists and Indexes of Names and Works in Zoology*, and the 1995 Centenary History entitled *Towards Stability in the Names of Animals*.

For further information, please contact: Dr Ch. Kropf, Natural History Museum, Bernastrasse 15, CH-3005 Berne, Switzerland (Phone: +31 350 7260; Fax: +31 350 7499; e-mail: chkropf@nmbe.unibe.ch).

Towards Stability in the Names of Animals

The International Commission on Zoological Nomenclature was founded on 18 September 1895. In recognition of its Centenary a history of the development of nomenclature since the 18th century and of the Commission has been published entitled '*Towards Stability in the Names of Animals — a History of the International Commission on Zoological Nomenclature 1895–1995*' (ISBN 0 85301 005 6). It is 104 pages (250 × 174 mm) with 18 full-page illustrations, 14 being of eminent zoologists who played a crucial part in the evolution of the system of animal nomenclature as universally accepted today. The book contains a list of all the Commissioners from 1895 to the present. The main text was written by R.V. Melville (former Secretary of the Commission) and has been completed and updated following his death.

Copies may be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. *or* A.A.Z.N., Attn. Dr Al Norrbom, c/o USDA Systematic Entomology Laboratory, MRC-168, National Museum of Natural History, Washington D.C. 20560, U.S.A.

The cost is £30 or $50 (including surface postage); members of the American and European Associations for Zoological Nomenclature are offered the reduced price of £20 or $35. Payment should accompany orders.

Case 2906

Anomalina d'Orbigny, 1826 (Foraminiferida): proposed designation of *A. ariminensis* d'Orbigny in Fornasini, 1902 as the type species

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Abstract. The purpose of this application is to stabilise the usage of the name *Anomalina* d'Orbigny, 1826 (family ANOMALINIDAE Cushman, 1927) for a genus of Cretaceous to Recent benthonic foraminifera of worldwide distribution by the designation of *A. ariminensis* d'Orbigny in Fornasini, 1902 as the type species. At present the nominal species *A. punctulata* d'Orbigny, 1826 is the type but the original material of this taxon has been lost and the species has not been recognised since its first publication. Lack of definition has resulted in the genus becoming heterogeneous through time.

Keywords. Nomenclature; taxonomy; Foraminiferida; ANOMALINIDAE; *Anomalina*; *Anomalina punctulata*; *Anomalina ariminensis*.

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1. d'Orbigny (1826, p. 282) described the new genus *Anomalina* and included five new taxa, *A. punctulata*, *A. ariminensis*, *A. elegans*, *A. nautiloides* and *A. orbicularis*. The last four were only names in a list and thus nomina nuda, but *A. punctulata* from l'Ile de France (Mauritius) was made available (Article 12b(7) of the Code) by the inclusion of drawings (pl. 15, figs. 1–3) of the taxon. Since *A. punctulata* was the only included species cited by an available name, it is the type of *Anomalina* by monotypy (and not by subsequent designation by Cushman, 1915, as incorrectly stated by Galloway, 1933, p. 287, and many subsequent authors). d'Orbigny's (1826) drawings of *A. punctulata* show a very low trochospire, a partially evolute spiral side and evolute umbilical side, a spiral plug, a small sunken umbilicus, and an interiomarginal aperture which is probably extraumbilical.

2. The names of the other taxonomic species included in *Anomalina* by d'Orbigny (1826) were made available at later dates. d'Orbigny himself (1852) made available *A. nautiloides* by description and Fornasini (1908, pl. 2, figs. 9, 9a) published the drawings from d'Orbigny's 'Planches inédites'; *A. elegans* was made available by Parker, Jones & Brady (1865, p. 25, pl. 2, fig. 73) when they published a drawing based on d'Orbigny's model no. 42; and *A. ariminensis* and *A. orbicularis* were made available by Fornasini (1902, p. 63, fig. 62 and p. 64, fig. 63 respectively) through the publication of drawings from the 'Planches inédites'.

3. Loeblich & Tappan (1964, p. 754) were the first authors to draw attention to the confusion surrounding *Anomalina* as a genus. They attributed this to the fact that the type species *A. punctulata* had not been recognised since its original description, and reported that the type material was missing from the collections of the Muséum National d'Histoire Naturelle, Paris. As a result, the concept of *Anomalina* was

poorly understood, and its relation to the genus *Anomalinoides* Brotzen, 1942 (type species *Anomalina pinguis* Jennings, 1936) was unclear. Nevertheless, Loeblich & Tappan (1964) maintained both genera as distinct, basing their description and diagnosis of *Anomalina* on the original figures of *A. punctulata*.

4. Hansen & Rögl (1980, p. 153) reported that they had made an application to the Commission to seek the suppression of the name *Anomalina* in favour of *Epistomaroides* Uchio, 1952 (type species *Discorbina polystomelloides* Parker & Jones, 1865) on the grounds of what they perceived to be the misidentification of *A. punctulata* by d'Orbigny (1826). Their reasoning was based on the fact that they had recovered specimens from Mauritius with certain similarities to d'Orbigny's drawings of *A. punctulata* but with features identifying them as the species *Epistomaroides punctatus* (Said, 1949, p. 37, pl. 4, fig. 23), originally described from the Red Sea. They pointed out that the status of *Anomalina* had been uncertain since its establishment, and that this uncertainty had led various authors to create a series of genera to cover the wide range of morphologies that had at various times been covered by *Anomalina*. Hansen & Rögl (1980) strengthened Loeblich & Tappan's (1964) claim of the persistent non-recognition of *A. punctulata* by reporting on the numerous failed attempts by a variety of researchers to obtain specimens from the type locality or anywhere else. For the sake of stability Hansen and Rögl made an application to the Commission (April 1979) for the suppression of *Anomalina*.

5. In their reclassification of the Foraminifera, Loeblich & Tappan (1984, p. 51; 1987, p. 604) followed the intentions of Hansen & Rögl's application and replaced the names *Anomalina* and ANOMALINIDAE Cushman, 1927 (p. 92) by *Epistomaroides* and ALFREDINIDAE Singh & Kalia, 1972, thereby pre-empting a decision by the Commission.

6. Hansen & Rögl (in litt., September and December, 1988) withdrew their application before it was published following adverse reactions received by the Commission. Various authors (see Haynes, 1990, pp. 519, 528 and Whittaker, 1988, p. 138) objected to the nomenclature adopted by Loeblich & Tappan (1984, 1987) and retained the use of *Anomalina* and ANOMALINIDAE. Haynes (1990) pointed out that Hansen and Rögl's failure to find specimens of *Anomalina punctulata* from Mauritius and the finding of those of *Epistomaroides punctatus* instead does not, and indeed cannot, prove the inaccuracy of d'Orbigny's (1826) description and drawings of *A. punctulata*. As I have argued (Revets, 1994), d'Orbigny was too conscientious an observer not to notice the presence of morphological features which characterise *Epistomaroides*, particularly since *Epistomaroides* specimens are very large (often exceeding 1000 µm) so that their details were well within the range of resolution of d'Orbigny's microscope.

7. The concept of *Anomalina* cannot be defined through its current type species, *A. punctulata*, because the original material is lost and no other specimens that could be assigned to the species illustrated in the original figures have ever been recovered from the type locality or elsewhere. The lack of type material and the consequent imprecision in the concept of the genus has resulted in the genus becoming more and more heterogeneous. At various times more than 300 species have been included in the genus, many of which have subsequently been reclassified in *Cibicidoides* Thalmann, 1939, *Anomalinoides* Brotzen, 1942 or *Gavelinella* Brotzen, 1942. Uncertainty and, more recently, instability are causing confusion. In order to rectify this

undesirable situation I propose that the type status of *A. punctulata* be set aside and *A. ariminensis* d'Orbigny in Fornasini, 1902 be designated as the type. The Recent holotype of *A. ariminensis* from Rimini (Italy) is in the collections of the Muséum National d'Histoire Naturelle, Paris (catalogue no. F0437) and topotypes are readily available.

8. The characteristics of *Anomalina ariminensis* are sufficiently distinct from the type species of related genera to maintain the genus *Anomalina* separate. *A. ariminensis* most resembles *Nautilus incrassatus* Fichtel & Moll, 1798, a species currently included in *Anomalinoides* (see BZN **45**: 104; June 1988), but differs in having more crescentic chambers, a larger number of chambers in the final whorl, a less clearly separated spiral plug, and wider and more raised sutures (see Revets, 1994, p. 298). I (Revets, 1994) clarified the status of all the taxonomic species originally included by d'Orbigny (1826) in *Anomalina* (see para. 1 above). I recorded that the type specimen of *A. elegans* is badly preserved and that topotypes show the presence of coverplates, a feature that points to a very different familial affiliation. *Anomalina nautiloides* clearly belongs in *Amphistegina* d'Orbigny, 1826. *Anomalina orbicularis* is possibly a junior synonym of *Nautilus asterizans* Fichtel & Moll, 1798 (the type species of *Nonionina* d'Orbigny, 1826) and of *Florilus stellatus* de Montfort, 1808 (the type species of *Florilus* de Montfort, 1808); the names *Nonionina* and *Florilus* became misapplied and were suppressed in Opinion 1568 (March 1990). *Nautilus asterizans* was erroneously assigned by Hansen & Rögl (1980) to *Hanzawaia* Asano, 1944 and is now the type species of *Riminopsis* Revets, 1996 (ref. 1996a); a lectotype was designated by Rögl & Hansen (1984, p. 34, pl. 8, figs. 1–3). The morphology of *A. ariminensis* is closest to that shown in d'Orbigny's drawing of *A. punctulata* and *ariminensis* is thus the most appropriate species for designation as the type species of *Anomalina*.

9. The specific name of *Anomalina ariminensis* d'Orbigny in Fornasini, 1902 (p. 63, fig. 62) was for some time confused with that of *Planulina ariminensis* d'Orbigny, 1826 (p. 280, pl. 14, figs. 1–3). The confusion originated with Brady (1884), who cited *Anomalina* in combination with *ariminensis* but in the sense of *Planulina*. Fornasini (1902, p. 64) carefully distinguished *A. ariminensis* from *P. ariminensis*. The confusion was later compounded by Cushman (1915) who purported to illustrate *A. ariminensis* but used d'Orbigny's (1826) figures of *Planulina ariminensis*. However, from 1928 onwards Cushman used the correct combination of species and drawings. Topotypes of both species show very clearly the major differences between these two taxa.

10. The revision of anomalinid genera (Revets, 1996b) has shown the need to maintain a genus distinct from *Anomalinoides*, *Cibicidoides*, *Hanzawaia*, *Riminopsis* and *Heterolepa* Franzenau, 1884. Suppression of the name *Anomalina*, which has been in use for 170 years, would necessitate the creation of a new name for a genus to cover the species which cannot be reassigned to either *Cibicidoides* or *Anomalinoides* (similarly, as a result of the suppression of *Florilus* the creation of the new genus *Riminopsis* Revets, 1996 became necessary). This revision also emphasized the point made earlier by Whittaker (1988) and Haynes (1990) on the need to retain the widely-used family taxon ANOMALINIDAE. The concept of the ANOMALINIDAE is very different from that covered by the ALFREDINIDAE, and suppression would necessitate the establishment of a new family name to cover the concept currently embodied in ANOMALINIDAE.

11. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Anomalina* d'Orbigny, 1826 and to designate *Anomalina ariminensis* d'Orbigny in Fornasini, 1902 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Anomalina* d'Orbigny, 1826 (gender: feminine), type species *Anomalina ariminensis* d'Orbigny in Fornasini, 1902 by the designation in (1) above;

(3) to place on the Official List of Specific Names in Zoology the name *ariminensis* d'Orbigny in Fornasini, 1902, as published in the binomen *Anomalina ariminensis* (specific name of the type species of *Anomalina* d'Orbigny, 1826).

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Case 2940

Riisea and *riisei* Duchassaing & Michelotti, 1860 (Cnidaria, Anthozoa): proposed conservation as the correct original spellings of generic and specific names based on the surname Riise

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Abstract. The purpose of this application is to conserve the name *Riisea* for a genus of gorgonian corals, and the specific names of *Carijoa riisei* (originally in *Clavularia*) and *Thalamophyllia riisei* (originally in *Desmophyllum*). These names have been universally accepted for more than a century and are attributed to Duchassaing & Michelotti, 1860. However, the names were originally published as *Rusea* and *rusei*; they were based on the supposed personal surname Ruse or Rüse, but in 1864 Duchassaing & Michelotti corrected the names to correspond with the actual surname Riise.

Keywords. Nomenclature; taxonomy; Anthozoa; corals; *Riisea*; *Carijoa riisei*; *Thalamophyllia riisei*.

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1. In their important memoir on West Indian corals Duchassaing & Michelotti (1860) established (p. 294 [p. 18 in the separates, also issued in 1860]) the genus *Rusea* for the single new species of gorgonian *R. paniculata*. They stated that the specimen was 'donnée par Mr. Rüse savant Pharmacien à St. Thomas'.

2. In the same memoir Duchassaing & Michelotti established a new species of 'Alcyoniens Sclérodermiques' called *Clavularia Rusei* (p. 310 [p. 34]) and a species of scleractinian coral *Desmophyllum Rusei* (p. 337 [p. 61]); the latter was 'trouvée à St. Thomas par Mr. Ruse, Pharmacien de cette ville'. A species of 'Zoanthinae' called *Gemmaria Rusei* was described on p. 331 [p. 55] with the comment 'Nous la dédions à Mr Rüse, Chimiste-Pharmacien des plus distingués, qui demeure à St.-Thomas et vient de la trouver dans cette île'.

3. In a supplementary memoir Duchassaing & Michelotti (1864) recognized that there had been a mistake about the surname of the 'pharmacien': *Clavularia Rusei* was emended (p. 117 [p. 23 in the separates]) to *C. Riisei* with the comment 'On doit écrire *Riisei*, non *Rusei*'. Similarly, but without comment, *Rusea* was emended (p. 108 [p. 14]) to *Riisea*; *Desmophyllum Rusei* became *D. Riisei* (p. 158 [p. 66]) and *Gemmaria Rusei* became *G. Riisei* (p. 135 [p. 43]). The surname Riise had been misread as Rüse or Ruse.

4. Since there was no internal evidence of error in the original (1860) publication, under Article 33b of the Code the spellings *Riisea* and *riisei* are unjustified

emendations (and junior objective synonyms), and have their own authorship of Duchassaing & Michelotti, 1864.

5. The gorgonian generic name has been given as *Riisea* Duchassaing & Michelotti, 1860 by all workers during the past century; the only exceptions before then were Kölliker (1865, p. 140), who was probably unaware of the previous year's correction and used *Rusea*, and Studer [& Wright] (1887, p. 41), who used *Rüsea*. Examples of authors using *Riisea* are Duchassaing (1870), Wright & Studer (1889), Deichmann (1936), Bayer (1956, 1961, 1981) and those mentioned in para. 7 below; others have been given to the Commission Secretariat.

6. With the exception of Kölliker (1865), the spelling *riisei* has always been used for the specific name of *Clavularia rusei* (also in combination with *Telesto* and *Carijoa*). This spelling has also been used without exception for the specific name of *Desmophyllum rusei* (also in combination with *Thalamophyllia* and *Cyathoceras*). Examples of the use of *riisei* include the works mentioned in paras. 5 and 7. The species *Gemmaria riisei* (originally *G. rusei*) was considered unrecognizable by Verrill (1900, p. 562) and the name (in either spelling) has apparently not been used since; we mention it only for the sake of consistency and do not propose any formal action to conserve it.

7. The species *Riisea paniculata* is a common gorgonian coral in moderate depths throughout the Caribbean area, and is abundantly represented in museum collections. *Carijoa riisei* (Duchassaing & Michelotti, 1860) is a common fouling organism in the tropical western Atlantic, and the scleractinian coral *Thalamophyllia riisei* is a solitary coral in deep-reef communities widely distributed from the Straits of Florida to the northeastern coast of South America. They are dealt with in the non-taxonomic or popular literature, such as Lang (1974), Land, Lang & Barnes (1977), Colin (1978), Cairns et al. (1991) and Humann (1993). Since the names *Riisea* and *riisei* have been in universal use this century, always attributed to Duchassaing & Michelotti (1860), a return to their original and mistakenly founded spellings would not be in the interests of stability in nomenclature.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to rule:
   (a) that the correct original spelling of the generic name *Rusea* Duchassaing & Michelotti, 1860 is *Riisea*;
   (b) that the correct original spelling of the specific name *rusei* Duchassaing & Michelotti, 1860, as published in the binomina *Clavularia rusei* and *Desmophyllum rusei*, is *riisei*;
(2) to place on the Official List of Generic Names in Zoology the name *Riisea* Duchassaing & Michelotti, 1860 (gender: feminine), type species by monotypy *Riisea paniculata* Duchassaing & Michelotti, 1860 (spelling emended by the ruling in (1)(a) above);
(3) to place on the Official List of Specific Names in Zoology the name *riisei* Duchassaing & Michelotti, 1960, as published in the binomina *Clavularia rusei* and *Desmophyllum rusei* (spelling emended by the ruling in (1)(b) above);
(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Rusea* Duchassaing & Michelotti, 1860 (ruled in (1)(a) above to be an incorrect original spelling of *Riisea*);

(5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *rusei* Duchassaing & Michelotti, 1860, as published in the binomina *Clavularia rusei* and *Desmophyllum rusei* (ruled in (1)(b) above to be an incorrect original spelling of *riisei*).

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Case 2999

Umbellula Cuvier, [1797] (Cnidaria, Anthozoa): proposed conservation as the correct original spelling, and corrections to the entries relating to *Umbellularia* Lamarck, 1801 on the Official Lists and Indexes of Names in Zoology

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Abstract. Cuvier [1797] published the generic name *Ombellula* for a species of Arctic deep-sea pennatulacean (sea pen) which had been named *Isis encrinus* by Linnaeus (1758). In 1800 Cuvier spelled the name as *Umbellula*, and this generic name for *U. encrinus* and other species has been widely and universally used for more than 120 years. A recent work has used the spelling *Ombellula* for the first time since 1797, and the conservation of *Umbellula* is proposed. *Umbellularia* Lamarck, 1801, a junior objective synonym of *Umbellula*, was in usage during the earlier part of the 19th-century; the entries on the Official Lists and Indexes of Generic and Family-Group Names relating to this name are erroneous and corrections are proposed.

Keywords. Nomenclature; taxonomy; Anthozoa; Pennatulacea; sea pens; *Ombellula*; *Umbellula*; *Umbellularia*; *Umbellula encrinus*.

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1. John Ellis (1753, 1755) described and illustrated one of two specimens of a giant deep-sea pennatulacean collected at latitude 79°N. near Greenland (perhaps really Spitzbergen: Lindahl, 1874, pp. 3, 14) by Captain Adrians of the whaling ship *Britannia* (for the history of these and other specimens see Gray, 1870, Lindahl, 1874 and Danielssen & Koren, 1884). Ellis named the species as 'Hydra marina arctica' or 'Clustered Sea-Polype'. The second specimen was described by Mylius (1753, 1755) as 'Asterias zoophytos composita' or 'Zoophytaria groenlandica'. No other specimens were reported for more than a century.

2. Linnaeus (1758, p. 800) placed the animal described by Ellis in his genus *Isis* as the species *I. encrinus*; he did not mention the description by Mylius. Ellis & Solander (1786, p. 67) transferred it to *Pennatula*.

3. Cuvier described the pennatulacean genus 'Ombellules, *Ombellula*' on p. 675 of his *Tableau élémentaire de l'histoire des animaux*; this work was published between 22 September and 24 December 1797 (see Donovan, BZN **53**: 248), so Cuvier's name should be cited with the date [1797]. The genus contained no nominal species, but Cuvier stated 'On n'en connoît qu'une espèce, qui se trouve dans la mer de

Groenland'; the description shows that *Ombellula* was based on the specimen described by Ellis and named *Isis encrinus* by Linnaeus.

4. Wiedemann (1800) published a German translation of Cuvier [1797], and on p. 583 latinized 'Ombellules' to *Umbellula*. Cuvier himself (1800, Table 9) changed *Ombellula* to *Umbellula*. Under the Code the *Umbellula* of Cuvier (1800) or Wiedemann is an incorrect spelling of the *Ombellula* of 1797, but the original spelling remained entirely unused for nearly 200 years (see para. 10 below).

5. Lamarck (1801, p. 380) mentioned Ellis (but not Mylius) when establishing the nominal genus 'Umbellulaire, *Umbellularia*'; this contained the single species *Umbellularia groenlandica*, with *Pennatula encrinus* (Linnaeus, 1758) given as a synonym. No reason was given by Lamarck for using the specific name *groenlandica*, which is a junior objective synonym of *encrinus*; on the previous page (p. 379) he had used *Encrinus* as a generic name for two crinoid species, and he may have been reluctant to employ the word in a different sense; 'Encrinus' had been used since pre-Linnaean times for fossil crinoids (see BZN **18**: 65–68 for a historical survey). Blumenbach (1779, p. 435) used *Encrinus* for a genus containing three species: a Recent crinoid, an ascidian, and the new anthozoan species *E. mylii*. The name *mylii* was based on the description of the second Greenland specimen by Mylius (see para. 1 above) and is a synonym of *encrinus* Linnaeus and *groenlandica* Lamarck. In Opinion 636 the Commission conserved *Encrinus* Lamarck, 1801 by suppressing all previous uses of *Encrinus* as a generic name.

6. Early 19th-century workers did not use Cuvier's name *Ombellula* or *Umbellula* but instead adopted *Umbellularia* Lamarck, 1801. Gray (1840, p. 75) based the family-group name UMBELLARIADAE on the generic name '*Umbellaria*'; the latter was presumably an error for *Umbellularia*, since this was the name used elsewhere by Gray (for example in 1860, p. 25, as *Umbellularia groenlandica*) and in 1870 (p. 38) he inaccurately referred to his 1840 family name as having been spelled UMBELLULARIADAE.

7. Gray (1870, p. 38) in a suprageneric 'Section Umbellularia' reintroduced the senior generic synonym *Umbellula* [sic] Cuvier, [1797]. He included a single species, mentioning its two names *encrinus* Linnaeus and *groenlandica* Lamarck; under Article 69a(vii) of the Code Gray's action fixes *Isis encrinus* Linnaeus, 1758 as the type species by subsequent monotypy. *Umbellula* quickly became accepted (e.g. Lindahl, 1874; Kölliker, 1875) and the last usage of *Umbellularia* as a valid name was by Wyville-Thomson (1878, p. 142). For the past 120 years the usage of *Umbellula* has been both widespread and universal, and the Commission Secretariat has a list of more than 60 references to illustrate this. The senior specific name *encrinus* Linnaeus, 1758 is also in universal use. Species of the genus occur worldwide, and *Umbellula* has been used not only in taxonomic works but also in textbooks, handbooks, popular accounts and publications dealing with deep-sea biology and biogeography. Recent examples include Broch (1958), Heezen & Hollister (1971), Bayer (1973), Pasternak (1975), Grasshoff (1982, 1991), Werner (1984), Schaefer (1985), Tixier-Durivault (1987) and Kilias (1993).

8. Lindahl (1874, p. 25) based the family name UMBELLULAE (correctly UMBELLULIDAE) on *Umbellula*. This name has been very widely used; under Article 40b of the Code it takes the precedence of Gray's name of 1840 based on the junior generic synonym *Umbellularia* (para. 6 above), and it should be cited as UMBELLULIDAE Lindahl, 1874 (1840).

9. In 1960 Margaret Spillane of the Commission Secretariat published a report (BZN **18**: 65–68) on the crinoid generic name *Encrinus* (cf. para. 5 above), together with proposals mainly concerning that name. This action was taken in response to a an application by Dr T. Mortensen, who had subsequently died. Unfortunately the proposals also included placing the supposedly valid *Umbellularia* Lamarck, 1801 on the Official List. Neither Spillane nor anybody else realized or commented that the anthozoan name *Umbellularia* had long been entirely replaced by the senior Cuvier synonym *Umbellula*; indeed *Umbellula* was not mentioned. In Opinion 636 (September 1962) *Umbellularia* was placed on the Official List of Generic Names, with *Isis encrinus* Linnaeus, 1758 as the type species by monotypy (in fact under Article 68d of the Code the type species is *Umbellularia groenlandica* Lamarck, 1801, since this name was originally used as valid even though it is a junior objective synonym of *I. encrinus*; see para. 5 above). Lindahl's family name of 1874 (cf. para. 8 above) was placed on the Official List with the erroneous statement that it was based on *Umbellularia* (for which reason it was 'corrected' to UMBELLULARIIDAE), but Gray's name of 1840 actually based on that nominal genus was not mentioned. For reasons of the priority and usage of *Umbellula* and of accuracy the entries on the Official Lists and Indexes relating to *Umbellularia* and the family names need to be corrected, and this is proposed in para. 12 below.

10. As reported above, *Umbellula* has been in wide and universal use for more than a century. Despite this, and in contravention of Article 23b of the Code, Williams (1995, p. 118) has very recently adopted the spelling *Ombellula*, which had never been used since the original publication by Cuvier in 1797. Williams referred 42 species to *Ombellula*, and stated that the type species was *Isis encrinus* by the designation of Danielssen & Koren (1884); the fixation was actually by Gray's subsequent monotypy in 1870 (para. 7 above).

11. Introduction of the completely unused spelling *Ombellula* would be very destabilizing, and the long universal usage of *Umbellula* Cuvier, [1797] constitutes a clear prima facie case for its conservation.

12. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to rule that the correct original spelling of the name *Ombellula* Cuvier, [1797] is *Umbellula*;

(2) to place on the Official List of Generic Names in Zoology the name *Umbellula* Cuvier, [1797] (gender: feminine), type species by subsequent monotypy (Gray, 1870) *Isis encrinus* Linnaeus, 1758 (spelling emended by the ruling in (1) above);

(3) to emend the entry on the Official List of Specific Names in Zoology for the name *encrinus* Linnaeus, 1758, as published in the binomen *Isis encrinus*, to record that *Isis encrinus* is the type species of *Umbellula* Cuvier, [1797];

(4) to place on the Official List of Family-Group Names in Zoology the name UMBELLULIDAE Lindahl, 1874 (1840), (type genus *Umbellula* Cuvier, [1797]);

(5) to delete the entry on the Official List of Generic Names in Zoology for the name *Umbellularia* Lamarck, 1801;

(6) to delete the entry on the Official List of Family-Group Names in Zoology for the name UMBELLULARIIDAE Lindahl, 1874;

(7) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
  (a) *Ombellula* Cuvier, [1797] (an incorrect original spelling of *Umbellula* by the ruling in (1) above);
  (b) *Umbellularia* Lamarck, 1801 (a junior objective synonym of *Umbellula* Cuvier, [1797]);

(8) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name UMBELLULARIIDAE Gray, 1840 (type genus *Umbellularia* Lamarck, 1801, a junior objective synonym of *Umbellula* Cuvier, [1797]) (replaced under Article 40 by UMBELLULIDAE Lindahl, 1874 (1840));

(9) to delete from the Official Index of Rejected and Invalid Family-Group Names in Zoology the [inaccurate] entries for the following names:
  (a) UMBELLULAE Lindahl, 1874;
  (b) UMBELLULEAE Kölliker, 1875.

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Case 2939

Galba Schrank, 1803 (Mollusca, Gastropoda): proposed designation of *Buccinum truncatulum* Müller, 1774 as the type species

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Abstract. The purpose of this application is to conserve the usage of the name *Galba* Schrank, 1803 (family LYMNAEIDAE) for a group of pulmonate fresh water snails by the designation of *Buccinum truncatulum* Müller, 1774 as the type species, in accord with universal usage. At present the nominal species *G. pusilla* Schrank, 1803 is the type by monotypy but the original material of this taxon has been lost and the species is not identifiable from its brief description. The name *Galba* is used either for a genus or for a subgenus of *Lymnaea* Lamarck, 1799. *Galba truncatula* is widespread and of economic importance. It is well known, particularly to parasitologists, as an intermediate host of *Fasciola hepatica* Linnaeus, 1758, the liver fluke of sheep and cattle.

Keywords. Nomenclature; taxonomy; Gastropoda; LYMNAEIDAE; *Galba*; *Galba truncatula*.

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1. Schrank (1803) established the new genus *Galba* (p. 262) and the single included species *Galba pusilla* (p. 285), which is therefore the type by monotypy. The descriptions of both the genus and the species were brief but the information of a dextrally-spiralled shell and triangular tentacles is sufficient to identify *G. pusilla* as belonging in the family LYMNAEIDAE. The taxon was represented by juvenile specimens (indicated by the very small shells, 'the size of millet grains', with three whorls). The shell was described as thin, transparent light brownish yellow or light brown when containing the snail body, or colourless when empty. It was covered by growth lines, and was high conical or turriculate in shape, with an oval aperture and blunt apex.

2. Subsequent authors have overlooked Schrank's (1803) nominal species *Galba pusilla*. Dall (1905, p. 60) noted: '*Galba* Schrank *Fauna Boica* III, pt. 2, pp. 262, 285, 1803. Sole ex. *L[ymnaea] truncatula* Müller', and malacologists and parasitologists this century have followed him in considering *Buccinum truncatulum* Müller, 1774 (p. 130), described from Thangelstedt, near Weimar, Germany, to be the type species of *Galba*. Schrank (1803, pp. 287–288), however, included *B. truncatulum* within the genus *Buccinum* Linnaeus, 1758.

3. The true identity of Schrank's (1803) species *Galba pusilla* cannot be ascertained. Schrank's collection of molluscs has been lost and no specialist has ever referred to its original contents. The description of *pusilla* could be applied to juvenile specimens of many European species of *Lymnaea* Lamarck, 1799 with high conical or turriculate shells, and would fit all species of the subgenera *Galba* and *Stagnicola*

Gray, 1840. In my view it most agrees with newborn *Lymnaea* (*Lymnaea*) *fragilis* Linnaeus, 1758 (see, for example, the illustration in Kruglov & Starobogatov, 1985, p. 28, fig. 2b).

4. The current situation threatens the stability of the generally accepted name *Galba* Schrank, 1803. In 1993 Kruglov & Starobogatov (p. 176) designated *Buccinum truncatulum* Müller, 1774 as the type species of *Truncatuliana* Servain, 1881 (p. 63), erroneously considering that this made it a junior objective synonym of *Galba*; in fact this action made *Truncatuliana* the valid name for the genus or subgenus with *B. truncatulum* as its type species. Servain (1881, pp. 43–64) established 20 groups within the genus *Lymnaea*, most without the fixation of type species. Some of the names he introduced have been used as valid for subgenera or sections of *Lymnaea* but the majority, including *Truncatuliana*, have not been used. *Truncatuliana* originally included five nominal species, among them *Buccinum truncatulum* Müller, 1774 (cited with 21 junior synonyms).

5. The names *Galba* and *G. truncatula* are much in use and have appeared in publications on mollusc and liver fluke taxonomy, biology, physiology, ecology and medicine, as well as general catalogues and guides. A representative sample covering these fields includes the recent works by Hubendick (1951, p. 122, fig. 306), Pantelouris (1965, pp. 17–23, 29, figs. 7–9), Odening (1971, pp. 39–46, figs. 17–20), Clarke (1981, p. 108, fig. 30), Soulsby (1982, pp. 40–43), Fitter & Manuel (1986, p. 1833, pl. 158, figs. 19.11–12), Pfleger & Chatfield (1988, p. 188), Fechter & Falkner (1990, p. 136) and Brown (1994, pp. 158, 340–341, fig. 76e). To conserve the usage of the name *Galba* Schrank, 1803 I propose that *Buccinum truncatulum* Müller, 1774 be designated the type species. Approval by the Commission will render the name *Truncatuliana* Servain, 1881 a junior objective synonym of *Galba*.

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Galba* Schrank, 1803 and to designate *Buccinum truncatulum truncatulum* Müller, 1774 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Galba* Schrank, 1803 (gender: feminine), type species by designation in (1) above *Buccinum truncatulum* Müller, 1774;

(3) to place on the Official List of Specific Names in Zoology the name *truncatulum* Müller, 1774, as published in the binomen *Buccinum truncatulum* (specific name of the type species of *Galba* Schrank, 1803);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Truncatuliana* Servain, 1881 (a junior objective synonym of *Galba* Schrank, 1803).

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Case 2963

Roeslerstammia Zeller, 1839 and *Acrolepiopsis* Gaedike, 1970 (Insecta, Lepidoptera): proposed conservation by the designation of *Alucita erxlebella* Fabricius, 1787 as the type species of *Roeslerstammia*; and *A. erxlebella* and *Tinea imella* Hübner, [1813] (currently *Roeslerstammia erxlebella* and *Monopis imella*): proposed conservation of the specific names by the designation of a neotype for *A. erxlebella*

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Abstract. The purpose of this application is to conserve the accustomed usage and understanding of the names for two genera of micromoths with wide distributions, *Roeslerstammia* Zeller, 1839 (Palaearctic; family ROESLERSTAMMIIDAE) and *Acrolepiopsis* Gaedike, 1970 (worldwide; family ACROLEPIIDAE), by designating *Alucita erxlebella* Fabricius, 1787 as the type species of *Roeslerstammia*. At present *R. assectella* Zeller, 1839 is the valid type species of both *Roeslerstammia* and *Acrolepiopsis*. It is also proposed that the usage of the specific names of *R. erxlebella* and *Monopis imella* (Hübner, [1813]) (family TINEIDAE) should be conserved by setting aside the only known syntype of *R. erxlebella*, which is a specimen of *M. imella*, and replacing it with a neotype.

Keywords. Nomenclature; taxonomy; Lepidoptera; micromoths; *Roeslerstammia*; *Acrolepiopsis*; *Roeslerstammia erxlebella*; *Acrolepiopsis assectella*; *Monopis imella*; Palaearctic.

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1. Fabricius (1787, p. 256) described *Alucita erxlebella* from an unstated number of specimens collected by Dr Schulz in the area of Göttingen, Germany. The identity of the species is undisputed and the name has been in common use for over 140 years. For example, in the last century it was used by Stainton (1854, p. 172), Herrich-Schaeffer ([1854], p. 137, pl. 51, fig. 355) and Heinemann (1870, p. 98), and more recently it has been referred to in many publications including those of Toll (1958, p. 89), Moriuti (1972, pp. 251–252), Zaguljaev (1981, pp. 418–419, figs. 395 (1, A), 396 (1, 2)) and Kyrki (1983, pp. 321–329, figs. 1–13). In the last two papers genitalia structures as well as larval chaetotaxy were described and figured and, mainly in the work of Kyrki, a comprehensive synonymy was also published.

2. I found recently that the Central European specimens referred to as '*erxlebella*' belong in two distinct and clearly separable species. It was therefore necessary to examine Fabricius's (1787) type material, originally in the Kiel Museum but now on indefinite loan to the Zoological Museum, Copenhagen. The single male syntype still extant is in bad condition, consisting only of the thorax, abdomen and hindwings. It is labelled (1) '*erxlebella*' [in Fabricius's handwriting], and (2) 'TYPE' [printed label].

Dissection of the genitalia revealed that this specimen, which corresponds with Fabricius's (1787) short description, actually belongs to a species of the family TINEIDAE, *Tinea imella* Hübner, [1813] (*Tinea* pl. 50, fig. 347), which is currently included in *Monopis* Hübner, 1826.

3. Acceptance of the syntype of *Alucita erxlebella* as the name-bearing type would result in the specific names *erxlebella* Fabricius, 1787 and *imella* Hübner, [1813] becoming synonyms. The well known species *imella* would be called *erxlebella*, and *erxlebella* as currently understood would be called *fuscocuprella* Haworth, [1828] (p. 569, published as *Tinea fuscocuprella*), an unnecessary replacement name for *erxlebella* and the next available synonym. To stabilise the current understanding and usage of the specific names *erxlebella* and *imella* I propose that a neotype for *erxlebella* be designated. This is the male pinned specimen labelled 'WÜRTTEMBERG Grossbottwar Wunnenstein 22.5.69 L. Süssner', and its genitalia on a slide labelled 'TIN 58 ♂ P. Huemer', deposited in the Zoological Museum, Copenhagen.

4. Zeller (1839, col. 202) described the genus *Roeslerstammia* and placed the five included species in two subgenera. The nominotypical subgenus included four species, among them *Roeslerstammia assectella* Zeller, 1839 (col. 203). The second subgenus was named *Chrysitella* Zeller, 1839 (col. 203) and contained the single nominal species *R. erxlebeniella* Zeller, 1839, with *Alucita erxlebella* Fabricius, 1787 and *Oecophora chrysitella* Treitschke, 1833 included as synonyms. The name *erxlebeniella* is invalid; it was either an unjustified emendation or an unnecessary replacement for *erxlebella* Fabricius.

5. Stainton (1854) considered that only the one species *Alucita erxlebella* Fabricius, 1787 was included in the genus *Roeslerstammia*. Fletcher (1928, p. 19; see also 1929, p. 195) designated *A. erxlebella* as the type species of *Roeslerstammia*. This nominal species was not among those originally included in the nominotypical subgenus of *Roeslerstammia* and the designation is therefore invalid (Articles 47a, 61b and 69a of the Code). Nevertheless it has been followed by most subsequent authors and Kloet & Hincks (1945, p. 134), Friese (1960, p. 24), Moriuti (1972, p. 250), Nye (in Koçak, 1981, pp. 13, 19–20), Kyrki (1983, p. 322), Gaedike (1989, p. 254) and Nye & Fletcher (1991, p. 269), for example, have cited, albeit incorrectly, *erxlebella* as the type species of the genus. Gaedike (1989) noted that Fletcher's (1928) designation was in accord with the concept of the genus at the time. The same species is the type by monotypy of *Chrysitella* Zeller, 1839 (para. 4 above); to my knowledge the latter name has never been used.

6. Koçak (1980, p. 22; 1981, p. 20) recognised that the type species of a genus or subgenus must be designated from among the originally included species. He cited *Roeslerstammia assectella* Zeller, 1839 as the type of *Roeslerstammia*, incorrectly attributing the designation to Zeller (1853). Koçak's designation is valid (Article 69a(iv) of the Code) but, as Koçak himself acknowledged, Gaedike (1970, p. 32) had already designated the same species as the type of his new genus *Acrolepiopsis*. Koçak's (1980) type designation, which rendered the name *Acrolepiopsis* a junior objective synonym of *Roeslerstammia*, has not been recognized by subsequent authors. Both the names *Roeslerstammia* and *Acrolepiopsis* have been used to refer to distinct genera (see, for example, Moriuti, 1972; Bradley, 1972, pp. 13–14; Zaguljaev, 1981, pp. 418–419; and Agassiz, 1996, pp. 106, 110) and to conserve their usage I propose that Koçak's (1980) type designation for *Roeslerstammia* be set aside and

Alucita erxlebella Fabricius, 1787 be designated as the type. This designation will render the unused name *Chrysitella* Zeller, 1839 an objective synonym of *Roeslerstammia*.

7. Gaedike (1970, pp. 32–50, pls. 9–13, figs. 60–96) based his new genus *Acrolepiopsis* (family ACROLEPIIDAE) on 11 nominal species which he considered to be valid, a number of which had previously been included in *Acrolepia* Curtis, 1838. Zeller (1839) based *R. assectella*, the species designated by Gaedike (1970) as the type of *Acrolepiopsis*, on 12 specimens from Berlin and Frankfurt. These are now included in the Zeller material in the Walsingham collection (collection label 1910/427) in the Natural History Museum, London. A lectotype, which lacks the abdomen, has been selected and is denoted by the usual circular, purple-edged label but Gaedike (in litt., November 1996) considers that the designation has never been published. The identity of *assectella* is undisputed.

8. The family-group name ROESLERSTAMMIIDAE was first used by Bruand (1850, p. 43, as 'Tribus Röslertammidae' [sic]). However, the family was not considered as valid until recently, when Kyrki (1983, p. 321) considered the name ROESLERSTAMMIIDAE to be a senior synonym of AMPHITHERIDAE Meyrick, 1913. Prior to this *Roeslerstammia* was included in various families such as ADELIIDAE, INCURVARIIDAE, ACROLEPIIDAE, TINEIDAE, PLUTELLIDAE and YPONOMEUTIDAE.

9. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous type fixations:
  (a) for the nominal species *Alucita erxlebella* Fabricius, 1787 and to designate as neotype the male specimen in the Zoological Museum, Copenhagen, referred to in para. 3 above;
  (b) for the nominal genus *Roeslerstammia* Zeller, 1839 and to designate *Alucita erxlebella* Fabricius, 1787 as the type species;

(2) to place on the Official List of Generic Names in Zoology the following names:
  (a) *Roeslerstammia* Zeller, 1839 (gender: feminine), type species by designation in (1)(b) above *Alucita erxlebella* Fabricius, 1787;
  (b) *Acrolepiopsis* Gaedike, 1970 (gender: feminine), type species by original designation *Roeslerstammia assectella* Zeller, 1839;

(3) to place on the Official List of Specific Names in Zoology the following names:
  (a) *erxlebella* Fabricius, 1787, as published in the binomen *Alucita erxlebella* and as defined by the neotype designated in (1)(a) above (specific name of the type species of *Roeslerstammia* Zeller, 1839);
  (b) *assectella* Zeller, 1839, as published in the binomen *Roeslerstammia assectella* (specific name of the type species of *Acrolepiopsis* Gaedike, 1970);
  (c) *imella* Hübner, [1813], as published in the binomen *Tinea imella*;

(3) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Chrysitella* Zeller, 1839 (an objective synonym of *Roeslerstammia* Zeller, 1839).

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Case 2988

Euchroeus Latreille, 1809 and *Chrysis purpurata* Fabricius, 1787 (currently *E. purpuratus*) (Insecta, Hymenoptera): proposed conservation of usage; and *Chrysis gloriosa* Fabricius, 1793: proposed suppression of the specific name

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Abstract. The main purpose of this application is to conserve the name *Euchroeus* Latreille, 1809 for a genus of parasitic cuckoo wasps (family CHRYSIDIDAE), and the specific name of its type species *Chrysis purpurata* Fabricius, 1787. These long used names are threatened by a lectotype designation for *C. purpurata* by L.S. Kimsey (1988); the specimen designated is one of *C. iris* Christ, 1791, and the designation would not only displace the name *iris* but would make *Euchroeus* a junior synonym of *Chrysis* Linnaeus, 1761. The specimen does not accord with the description of *C. purpurata* and it was probably not a syntype; it is proposed that the designation be set aside. A second purpose is the suppression of the specific name of *Chrysis gloriosa* Fabricius, 1793, a name which has long been misidentified as a senior synonym of *Holopyga amoenula* Dahlbom, 1845 (the type species of *Holopyga*). Another erroneous lectotype designation by Kimsey would make it a junior synonym of *Pseudomalus auratus* (Linnaeus, 1761); since *gloriosa* is in fact probably a senior synonym of a widely used name in some other genus its suppression is proposed.

Keywords. Nomenclature; taxonomy; Hymenoptera; cuckoo wasps; CHRYSIDIDAE; *Euchroeus*; *Euchroeus purpuratus*; *Chrysis gloriosa*; *Holopyga gloriosa.*

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1. Fabricius (1787, p. 283) described a European cuckoo wasp species as *Chrysis purpurata*. He repeated the description in 1793 (p. 240).

2. Some years later Fabricius (1804, p. 172) again described *C. purpurata*, but there were several differences from the texts of 1787 and 1793; for example, 'anus serratus' [tergum III serrated] had become 'anus quadridentatus' [tergum III with four teeth]. These differences suggest that the 1804 description actually applied to a different species.

3. Lepeletier (1806, p. 125) remarked on the differences between the descriptions of *C. purpurata* given by Fabricius in 1787 (and 1793) and in 1804: 'Nous prions M. Fabricius de nous dire si la *chrysis purpurata* de son syst. piezat. [1804] qui a l'extrémité quadridentée, d'après la description, est la même que la nôtre et celui de son ent. syst. [1793] qui a cette même extrémité dentée en scie'.

4. In 1805 Latreille (p. 238) referred to *C. purpurata*; he noted that it had 'son extrémité postérieure d'un rouge pourpre; anus ayant un grand nombre de dentelures'. This corresponds to the 1787 and 1793 description by Fabricius but not that of 1804. Four years later he (Latreille, 1809, p. 49) established the nominal genus *Euchroeus* with *C. purpurata* as the only species; the description of the genus noted 'Abdomen postice serratum, dentibus numerosis'. *E. purpuratus* (Fabricius, 1787) is very clearly defined by the original description and is unmistakable, and the genus *Euchroeus* has been accepted by numerous subsequent authors (e.g. Dahlbom, 1854; Trautmann, 1927; Linsenmaier, 1951, 1959, 1968; Kimsey, 1983; the Commission Secretariat has a list of 18 references). *Euchroeus* has also been used as the basis of family-group names (see Dahlbom, 1854, p. 361; Bohart & Kimsey, 1982, p. 198; Kimsey, 1983). Despite the action of Kimsey (1988; see para. 5 below), Pagliano & Scaramozzino (1990) and others have maintained existing usage; Strumia (1995) applied Article 80 of the Code when doing so.

5. Kimsey (1988) studied the specimens of CHRYSIDIDAE now in the Fabrician collections of the Zoologisk Museum in Copenhagen and found that the three existing specimens (originally in Kiel; see Zimsen, 1964, p. 382) labelled *C. purpurata* do not belong to the species called *Euchroeus purpuratus* by Latreille (1809) and universally by all subsequent authors (i.e. they do not match the original (1787) description of *C. purpurata*). Instead, they belong to the species *Chrysis iris* Christ, 1791 (a true *Chrysis*, of the *C. ignita* group of species). Despite this discrepancy Kimsey (p. 272) designated one of these specimens as lectotype of *C. purpurata*; this action of transferring the name *purpurata* to another taxon made *C. iris* Christ, 1791 a junior synonym of *C. purpurata* Fabricius, 1787 and, as she noted, made *Euchroeus* a junior synonym of *Chrysis* Linnaeus, 1761 (type species *Sphex ignita* Linnaeus, 1758 by designation by Latreille in 1810).

6. If Kimsey's lectotype designation were accepted the valid name of the genus known as *Euchroeus* since 1809 would be (as she said) *Brugmoia* Radoszkowski, 1877 (p. 26), of which the Asian species *B. pellucida* was the type by monotypy, and the valid name for *E. purpurata* auct. would be the new combination *B. quadrata* (Shuckard, 1836, p. 169; originally *Euchroeus quadratus*). Kimsey admitted (p. 273) that 'some argument could be make [sic] for conserving the name *Euchroeus*', but she asserted that 'this is a relatively rare group of species ... which has never had a major revision'. This last statement is not justified; for example Linsenmaier (1951 (pp. 26–34), 1959 (pp. 64–74), 1968 (pp. 38–54)) treated *Euchroeus* at length. Kimsey maintained her new scheme of nomenclature in Kimsey & Bohart (1990, p. 294).

7. Zimsen (1964) has recounted the history of Fabrician material. In 1798–1804 Fabricius studied the large Sehestedt and Tönder-Lund collections in Copenhagen, and as a result these contained many Fabrician type specimens. These collections were united by N. Tönder-Lund, and after his death they were purchased by the Danish State; many of the specimens were dispersed elsewhere, and almost all of the original labels were replaced in the middle of the last century (Zimsen, 1964, p. 12). The Fabricius collection long preserved at Kiel was transferred to Copenhagen at the time of Zimsen's revision.

8. Dahlbom (1854, p. xvii) reported that in 1847, when he studied the Sehestedt & Tönder-Lund collection in Copenhagen, he found a specimen (or specimens) of '*Chrysis purpurea* [sic] = *Euchroeus* id. nob.'; this corresponds to the original and

current usage of *purpuratus*. In contrast to this, Dahlbom reported (pp. xix–xxi, 369) that the Kiel specimens labelled *C. purpurata* were different ('*C. purpurata* = *C. nitidula* nob.'); he mentioned that in these specimens the quadridentate tergum corresponded to *C. nitidula* (a name which in the sense of Dahlbom and others corresponded to *C. iris* Christ, 1791 and not to *C. nitidula* Fabricius, 1775).

9. The description of '*Chrysis purpurata*' by Fabricius in 1804 was presumably based at least in part on the *C. iris* specimens later seen in Kiel by Dahlbom and, following their transfer, in Copenhagen by Kimsey, whereas any Copenhagen specimens used by Fabricius in the original (1787) description were lost after Dahlbom's time. In any event, Kimsey's lectotype designation is very destabilising for the reasons given in paras. 5 and 6 above, and we propose that it should be set aside; there is no need for a neotype designation because, as mentioned in para. 4, the original and universally accepted [apart from Kimsey] meaning of *Euchroeus purpuratus* (Fabricius, 1787) is plain from the original description and has not been disputed. It is worth noting, however, that four female Latreille specimens in the Spinola collection (see Dahlbom, 1854, p. 369) are now in the Museo Regionale di Scienze Naturali in Turin, and one of these could if necessary be designated as a neotype.

10. We should like to draw attention to *Chrysis gloriosa*, a nominal species described by Fabricius (1793, p. 242) from specimen[s] in the Desfontaines collection (once in Paris but now lost; see Zimsen, 1964, p. 17) from 'Barbaria' [North Africa] and clearly distinguished by him from the European *C. aurata* Linnaeus, 1761 (now *Pseudomalus auratus*), which he identified correctly. This description was repeated by Coquebert (1801, p. 58), who gave a colour illustration (pl. 14, fig. 1) of a Paris specimen identified by Fabricius himself.

11. Dahlbom (1854, p. xvii) reported '*C. gloriosa* e Tanger Schousboe, forma aliena, non typica' in the Sehestedt collection in Copenhagen; this did not match the original Fabricius description and Dahlbom (p. 272) equated it with his own *C. schousboei*. In contrast, Dahlbom stated (pp. xix, xxii, 54) that in Kiel '*C. gloriosa*' was the name given to a variety of his own *Holopyga ovata*, and again this did not match the original description by Fabricius (1793).

12. The name *Holopyga gloriosa* (Fabricius, 1793) has long been used, although mistakenly, as the valid synonym (see for example Bischoff, 1913; Bodenstein, 1939, p. 128) of *H. amoenula* Dahlbom, 1845, which is the type species of *Holopyga* Dahlbom, 1845 by the subsequent designation of Ashmead in 1902.

13. *Holopyga ovata* Dahlbom and several other taxa have been treated as 'varieties' of *H. gloriosa*. Linsenmaier (1959) in his revision of the CHRYSIDIDAE recognized several species in the '*Holopyga gloriosa* complex', and gave to some of them names previously used for so-called varieties of *H. gloriosa*, but apparently without knowledge of relevant type specimens. The name *gloriosa* was ascribed to a still undescribed North African species differing from Dahlbom's account of the Kiel specimens.

14. Kimsey (1988, p. 272) reported that what she supposed (but see para. 10 above) to be the type of *Chrysis gloriosa*, now in Copenhagen but originally in Kiel (see Zimsen, 1964, p. 383), is a specimen of *Pseudomalus auratus* (Linnaeus, 1761). Although this species had been distinguished from *C. gloriosa* by Fabricius in 1793 (para. 10 above), Kimsey described the specimen as the holotype (which amounts to

a lectotype designation: Article 74b of the Code) and treated *H. gloriosa* as a junior synonym of *P. auratus*, and this was repeated by Kimsey & Bohart (1990).

15. The true identity of *C. gloriosa* cannot be determined from the description by Fabricius (1793) or the illustration by Coquebert (1801); these do not fit any *Holopyga* species, although they are strikingly like the well-known and unmistakable *Chrysura purpureifrons* (Abeille, 1878). Certainly *C. gloriosa* was not the same as the interpretations by numerous authors since Dahlbom (*Holopyga amoenula* complex) or by Kimsey (*Pseudomalus auratus*). It has long been used in a mistaken sense in *Holopyga*, and since any eventual synonymization (e.g. by discovery of a true type specimen from the Desfontaines collection) would displace some generally accepted specific name we propose that the name *gloriosa* be suppressed except for purposes of homonymy.

16. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:
  (a) to set aside the lectotype designation by Kimsey (1988) for the nominal species *Chrysis purpurata* Fabricius, 1787;
  (b) to suppress the name *gloriosa* Fabricius, 1793, as published in the binomen *Chrysis gloriosa*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the name *Euchroeus* Latreille, 1809 (gender: masculine), type species by monotypy *Chrysis purpurata* Fabricius, 1787;

(3) to place on the Official List of Specific Names in Zoology the name *purpurata* Fabricius, 1787, as published in the binomen *Chrysis purpurata* (specific name of the type species of *Euchroeus* Latreille, 1809);

(4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *gloriosa* Fabricius, 1793, as published in the binomen *Chrysis gloriosa* and as suppressed in (1)(b) above.

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Case 2920

Diemenia atra Macleay, 1884 (currently *Demansia atra*; Reptilia, Serpentes): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of *Demansia atra* (Macleay, 1884, [29 November]) for a venomous snake (family ELAPIDAE) from Northern Queensland, Australia. The name is threatened by the synonym *Hoplocephalus vestigiatus* De Vis, 1884 (13 September) which was published two months earlier but remained unused until 1990.

Keywords. Nomenclature; taxonomy; Reptilia; Serpentes; snakes; *Demansia atra*; Northern Queensland.

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1. Macleay (1884, p. 549) proposed the name *Diemenia atra* for a new species of black elapid snake from Northern Queensland, Australia. The dates of publication of the *Proceedings of the Linnean Society of New South Wales* were set out by Fletcher (1896); that for vol. 9, part 3, in which Macleay's paper appeared (pp. 548–568) was given as 29 November 1884 (see also Ingram, 1990, p. 23). Boulenger (1896, p. 323) placed Macleay's name with a question mark in the synonymy of *Lycodon olivacea* Gray, 1842, considering the taxon to be a melanistic variant of the latter, now known as *Demansia olivacea*. Worrell (1952, 1963, 1969) also considered *atra* to be a synonym of *D. olivacea*, as did Loveridge (1934, in the combination *Demansia psammophis olivacea*). This taxonomic allocation was followed by most subsequent authors until Cogger & Lindner (1974, pp. 90–93) revived *Demansia atra* as a valid species. The taxon has been regarded as distinct since then.

2. De Vis (1884a, 13 September, p. 5) published a brief description of a snake in a local morning newspaper, *The Brisbane Courier*. The snake, *Hoplocephalus vestigiatus*, was noted as 'the foot-print snake, a name said to be suggested by the fancied resemblance of the white markings upon its back to tracks of feet', a description which is sufficient to make the name available. De Vis also provided (1884b, p. 138) a more detailed description in the *Proceedings of the Royal Society of Queensland*, published sometime after September (see Ingram, 1990, p. 27).

3. The original newspaper article (13 September 1884) was included in a report of a meeting of the Royal Society of Queensland held the previous evening. De Vis himself considered that names published in newspapers were unavailable and (1907, p. 4) referred to 'the rule which strictly requires that a new name shall be announced

in a publication addressed to the scientific world'. (There was in fact no such rule in the 1905 *Règles Internationales* and in Opinion 384 (April 1956) it was confirmed that names were not unavailable by reason of being published in non-scientific periodicals). Abstracts of papers read at meetings of the Royal Society of Queensland and of the Linnean Society of New South Wales were sent as a matter of course and in the public interest for publication in newspapers (see Ingram, 1990, p. 3). In their work on Australian fossil mammals, Mahoney & Ride (1975, p. 6) recorded that 'during the early history of the Australian Colonies, local newspapers played a most important part in the dissemination of scientific knowledge through their detailed reporting of scientific meetings, in much the same role as that played by *Nature* in London and *Zoologischer Anzeiger* in Leipzig — in fact many of the new names published in newspapers in Australia are in abstracts of papers, published in accounts of scientific meetings, and are identical with abstracts published later in scientific serials such as *Abstracts of the Proceedings of the Linnean Society of N.S.W.* and *Zoologischer Anzeiger*. Accordingly, wherever it has been possible for us to interpret a description as being adequate, or a name as published, we have accepted it. If subsequent workers judge that such names are questionably available and would upset established priorities, or, by giving priority to less complete descriptions, remove from type series specimens which would, through their inclusion in later and fuller descriptions, be available for selection as more desirable lectotypes, they should take steps to have such names formally set aside by the International Commission on Zoological Nomenclature rather than introduce instability by merely dismissing them on a subjective basis'.

4. De Vis's (13 September 1884) specific name of *Hoplocephalus vestigiatus* predated that of *Diemenia atra* Macleay, 1884 ([29 November]) by more than two months but was never recognized as valid until it was revived by Ingram (1990). It was placed by Boulenger (1896, p. 335) as a junior synonym of *Hoplocephalus superbus* (Günther, 1858), now *Austrelaps superbus*, where it remained until 1990. The name *vestigiatus* was largely neglected, and was not even mentioned in the revisionary works of Waite (1898), Rooij (1917), Kinghorn (1929), Loveridge (1934) and Worrell (1963). The only uses of *vestigiatus* since its original publication, other than the Queensland Museum type lists of Mack & Gunn (1953) and Covacevich (1971), have been its recent revival by Ingram (1990), followed by Hutchinson (1990) and Covacevich & Couper (1991a, 1991b).

5. On the other hand, the name *Demansia atra* has been used by more than 20 authors in at least 34 publications since 1974. These include Cogger (1978), Longmore (1986, pp. 38, 110), Wilson & Knowles (1988), Gow (1989), Hoser (1989), Ehmann (1992) and Glasby, Ross & Beesley (Eds., 1993). Among these works are the important guides by Cogger (1975 1992) to the herpetofauna of Australia. These works are of virtually universal influence for all sorts of studies on the biology of reptiles and amphibians of Australia, and are standard sources for more general and popular writings.

6. The two syntypes of Macleay's *Demansia atra* are in good condition in the Australian Museum, Sydney (catalogue nos. AMS B5941 and R31920) with known locality data (see Cogger, 1979b, p. 204). In contrast, the holotype of De Vis's *H. vestigiatus* in the Queensland Museum, Brisbane (catalogue no. J206) is not only 'in damaged condition' but is 'from an unknown locality' (see Mack & Gunn, 1953,

p. 61). Covacevich (1971, p. 63) reported the holotype as having no data and being 'faded; neck damaged; shape distorted; most of tail missing'. These differences probably account to a considerable degree for the persistent awareness by herpetologists of the name *atra*, whereas *vestigiatus* has been largely ignored.

7. We regard adoption of the name *vestigiatus* instead of *atra* for the Northern Queensland snake as an important threat to nomenclatural stability for the following reasons: (1) the long familiarity of herpetologists with the name *atra*, as opposed to the neglect of the name *vestigiatus*; (2) the prolific use of the name *atra* vs. little of *vestigiatus*; (3) the establishment of *atra* in the most influential compendia of the herpetofauna of Australia; (4) the special desirability of stability in the nomenclature of any venomous snakes (as species of *Demansia* are); and (5) the much better condition of the type material and the better locality data for *atra* as opposed to *vestigiatus*.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the name *vestigiatus* De Vis, 1884, as published in the binomen *Hoplocephalus vestigiatus*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Specific Names in Zoology the name *atra* Macleay, 1884, as published in the binomen *Diemenia atra*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *vestigiatus* De Vis, 1884, as published in the binomen *Hoplocephalus vestigiatus* and as suppressed in (1) above.

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Case 2921

Trigonocephalus pulcher Peters, 1863 (currently *Bothrops pulcher*) and *Bothrops albocarinatus* Shreve, 1934 (currently *Bothriechis oligolepis albocarinatus*) (Reptilia, Serpentes): proposed conservation of the specific and subspecific names by the designation of a neotype for *T. pulcher*

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Abstract. The purpose of this application is to conserve, by designation of a neotype for *Lachesis* (or *Bothrops* or *Porthidium*) *pulcher* (Peters, 1863), the accustomed usage of this name for a terrestrial species of pitviper (family VIPERIDAE) from Colombia and Ecuador, and of *Bothriechis oligolepis albocarinatus* (Shreve, 1934) for an arboreal pitviper from Ecuador and Peru. The specific name *pulcher* was originally based on a specimen of *albocarinatus* but has been universally misapplied since Boulenger (1896).

Keywords. Nomenclature; taxonomy; Reptilia; Serpentes; snakes; *Bothrops pulcher*; *Bothriechis oligolepis albocarinatus*; Colombia; Ecuador; Peru.

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1. W. Peters (1863, p. 672, footnote) proposed the name *Trigonocephalus pulcher* on the basis of one specimen collected in Ecuador ('Quito') and purchased from Brandt (R. Günther, Berlin, in litt.). Boulenger (1896, pp. 530, 539) was the first herpetologist to use the specific name *pulcher* (as *Lachesis pulcher*) after the original description. Subsequent authors have all followed Boulenger's (1896) usage and applied the specific name *pulcher*, in combination with the generic names *Lachesis* Daudin, 1803 or *Bothrops* Wagler, 1824, to a terrestrial species of pitviper found along the Pacific slopes of the Andes from southern Colombia (Valle del Cauca) to El Oro province of Ecuador.

2. The female holotype of *Trigonocephalus pulcher* Peters, 1863 is deposited in the Zoologisches Museum der Humboldt-Universität in Berlin (catalogue no. ZMB 3868). It has 21 dorsal scale rows around the mid-body, 173 ventrals, 61 mostly paired subcaudals and a dorsal colour pattern consisting of dark transverse bands on a green ground colour (see Schätti & Kramer, 1993, fig. 1). The specimen is identical with those identified as *Bothriechis oligolepis albocarinatus* (Shreve, 1934), an arboreal pitviper found in cloud forest and upper rainforest up to 2000 metres from southern Colombia (Putumayo) and the Amazonian basin of Ecuador eastward to the vicinity of Iquitos in Peru.

3. Schätti & Kramer (1993) concluded that *Bothrops albocarinata* (recte *albocarinatus*) Shreve, 1934 (p. 130), described from a female specimen from the 'Pastaza River, from Canelos to the Marañon River', which is now housed in the Museum of Comparative Zoology, Cambridge, Massachusetts (catalogue no. MCZ 36989), and the snake originally named *Lachesis bilineatus* var. *oligolepis* Werner, 1901 (p. 13) from Bolivia are conspecific. The latter taxon, known as *Bothriechis oligolepis oligolepis*, has a distribution from south of the depression of Huancabamba in Peru through the Cordillera Central and Cordillera de Carabaya including adjacent areas of Bolivia.

4. Amaral (1923, p. 104, footnote 4) pointed out the discrepancy in ventral scale counts between the holotype of *Trigonocephalus pulcher* Peters, 1863 and the two female specimens from 'Quito' and the Cordillera de Intag in Pichincha province of Ecuador kept in the Natural History Museum, London and referred by Boulenger (1896, p. 539) to *Lachesis pulcher*. Boulenger's material actually belongs to a species with a comparatively stout body, strong tubercular keels on the dorsal scales, and a characteristic pattern made up of triangular or slightly semi-circular lateral blotches on a reddish-brown to greyish-brown ground colour as well as a conspicuous dark triangular spot below the eye. Schätti & Kramer (1991) followed general usage in applying the name *pulcher* to this terrestrial Pacific pitviper but, on discovering that the Berlin holotype of *pulcher* was a specimen of the arboreal *Bothriechis oligolepis albocarinatus* (para. 2 above), Schätti & Kramer (1993, p. 258, fig. 3) described the terrestrial species under the new name *Porthidium almawebi*. The male holotype of this nominal species is in the Muséum d'Histoire Naturelle, Geneva (catalogue no. MHNG 2248.12).

5. If the Code were to be strictly applied the specific and subspecific names of *Bothriechis oligolepis albocarinatus* (Shreve, 1934) would be replaced by the senior synonym *pulcher* Peters, 1863, with *B. pulcher oligolepis* (Werner, 1901) as a subspecies. However, *pulcher* has never been used for the Amazonian species for which Peters (1863) proposed it, whereas the junior name *albocarinatus* has been consistently applied to the taxon since 1934. It would be undesirable to move the name *pulcher* to a snake which is not even congeneric and, for the sake of stability, Schätti & Kramer (1993) continued to use *albocarinatus* for the Ecuadorian forest pitviper because it is a well established name which has been consistently used since its description. Some important recent works in which the names *pulcher* and *albocarinatus* have been used, under *Bothrops* Wagler, 1824 and *Bothriopsis* Peters, 1861, for the terrestrial and arboreal species of pitviper respectively are J. A. Peters (1960), J. A. Peters & Orejas-Miranda (1970), Burger (1971), Hoge & Romano-Hoge (1981), Campbell & Lamar (1989) and Pérez-Santos & Moreno (1991). A representative list of a further 20 publications by 16 authors from 1911 to 1992 which include one or both names under various generic names including *Lachesis* Daudin, 1803 and *Bothriechis* Peters, 1859 is held by the Commission Secretariat.

6. We propose that the universal usage of the name *pulcher* (in combination with *Lachesis*, *Bothrops* or *Porthidium*) for a terrestrial species of pitviper from Colombia and Ecuador be maintained by setting aside the Berlin holotype as the name-bearing specimen and designating a neotype in accord with this usage. This action will remove *pulcher* from the synonymy of *albocarinatus*, so allowing the usage of the latter name to be maintained also. This approach is in accord with the Code, which

urges stability in the use of names (and stability is particularly important in the case of poisonous snakes). We propose that the holotype of *Porthidium almawebi* Schätti & Kramer, 1993 be designated the neotype of *pulcher*. We select this specimen rather than one of Boulenger's (para. 4 above) because the *almawebi* holotype is very well documented and has been illustrated (see Schatti & Kramer, 1993) and, moreover, is a male. The name *almawebi* (which has been used only once, by Golay et al., 1993, p. 83) will be rendered a junior objective synonym of *pulcher*, thus eliminating any possible future confusion about its status.

7. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous type fixations for the nominal species *Trigonocephalus pulcher* Peters, 1863 and to designate as neotype the male specimen (catalogue no. MHNG 2248.12) in the Muséum d'Histoire Naturelle, Genève;

(2) to place on the Official List of Specific Names in Zoology the following names:
   (a) *pulcher* Peters, 1863, as published in the binomen *Trigonocephalus pulcher* and as defined by the neotype designated in (1) above;
   (b) *albocarinatus* Shreve, 1934, as published in the binomen *Bothrops albocarinata* (recte *albocarinatus*);

(3) to place on the Official List of Rejected and Invalid Specific Names in Zoology the name *almawebi* Schätti & Kramer, 1993, as published in the binomen *Porthidium almawebi* (a junior objective synonym of *Trigonocephalus pulcher* Peters, 1863).

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Comment on the proposed conservation of *Plumularia* Lamarck, 1816 (Cnidaria, Hydrozoa) by the designation of *Sertularia setacea* Linnaeus, 1758 as the type species
(Case 2978; see BZN **53**: 167–170)

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In the application (para. 5) it is noted that the valid type designation for *Plumularia* Lamarck, 1816 is by Busk (1851). There is, however, an earlier designation by H. Milne Edwards in the Disciples edition of Cuvier's *Règne Animal*, vol. 20 (1836–1849), pl. 67, fig. 5, where *Plumularia pluma* (Linnaeus, 1758) is the only figured species of that genus. As the title page of the work says 'édition accompagnée de planches gravées représentant les types de tous les genres' this is a valid type designation. Here, the name *Plumularia cristata* Lamarck, 1816 is cited in the synonymy of *P. pluma*, while Lamarck (1816) cited *Sertularia pluma* in his synonymy of *P. cristata*.

H. Milne Edwards's type designation is older than that of Busk (1851) and invalidates the latter. This does not change anything in the proposal made in the application, as the words 'to set aside all previous designations of type species' (para. 12(1)) includes the designations of both H. Milne Edwards (1836–1849) and Busk (1851).

The dates of publication of the plates in Milne Edwards's volume are still very wide (see Cowan, 1976, *Journal of the Society for the Bibliography of Natural History*, **8**(1): 63–64) but all antedate 1851.

Comments on the proposed suppression for nomenclatural purposes of S.D. Kaicher's *Card Catalogue of World-Wide Shells* (1973–1992)
(Case 2964; see BZN **53**: 96–98, 273–277)

(1) Emily H. Vokes

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I have read with great dismay the request by Kabat for suppression of Kaicher's *Card Catalogue of World-Wide Shells*. This is the most frivolous bit of trivia to engage the attention of the Commission in my memory. Kaicher's work was never intended to be for nomenclatural purposes, any more than the dozens of shell picture books that have come onto the market in recent years. If you start having to act on every book that illustrates a supposed holotype or lectotype from some museum collection, you will be very busy indeed. You might start with Abbott & Dance's *Compendium of Seashells* (1982), which illustrates beautifully dozens of holotype or lectotye specimens.

The act of figuring a shell and mentioning it as a lectotype is not, to me, a valid designation of a lectotype. Unless she had stated that 'I here designate specimen no. XXXX as lectotype', she is merely quoting something on a label in a collection.

The very fact, as Kabat himself notes, that this work has never been cited in *Zoological Record* or other abstracting sources, seems to be indicative of the status of the work. There is no 'official disclaimer', but that concept was not in the Code when Kaicher was doing most of her work.

In spite of Kabat's carping about Kaicher's inadequacies, these cards are an extremely valuable tool not only for 'amateurs' but for professionals as well. I personally have found them to be most helpful in my own work, where many of the types of species named by Dall, especially, never previously illustrated were provided. I can do no better than to quote my colleague, R.N. Kilburn, who states: 'Perhaps the most valuable modern contribution to knowledge of the EPITONIIDAE is the illustrated card-index issued by Sally Diana Kaicher (1980, 1981, 1983), which provides excellent photographs of many type specimens, including most of the species described (and inadequately figured) by Jousseaume (1985, *Ann. Natal Museum*, v. 27(2), p. 241)'.

I believe the Commission has much better uses to put their time to.

(2) William G. Lyons

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The proposal by Kabat to suppress Kaicher's card catalogue has been crafted to diminish the work. The tone of the proposal is patronizing, some of its points are misleading, and others are based on unjustified assumptions (including that which indicates that the project has ended; Kaicher is still preparing card-packs, which are available at the usual address, and she is exploring options to correct and update the first 60 packs and reissue them in CD-ROM format). I cannot support this attempt to disparage a valuable contribution to malacology.

Kabat concedes that the catalogue meets the criteria of the Code for publication. He also concedes that inadvertent lectotype designations made in the catalogue are 'potentially valid' (para. 8), indirectly admitting that they were established within specifications of Article 74 of the Code. However, he alludes to ambiguity regarding their availability because the card-packs lack specific indication that they were issued for the purpose of providing a permanent scientific record, a criterion he himself considers subjective. He supports his argument with predictions of confusion and onerous burdens upon 'curators and professional malacologists' if the work is not suppressed. Kabat's case thus rests on Kaicher's intent, which he misrepresents, and upon the impacts of acceptance, which he overstates.

Kabat assumes that 'the purpose of these card-packs was to help amateur shell collectors with ... their personal shell collections' (para. 3; reiterated in the Abstract). That assumption, central to the proposal, is patently incorrect, as Kabat could have verified by contacting Kaicher or others familiar with the work. From the beginning, Kaicher has stated that the series is intended to provide information useful to anyone identifying mollusks, and she has stressed that many cards would be more useful to professionals than to amateurs. Given his misrepresentation of intent, Kabat's remark that Kaicher 'took pride ... that a number of type specimens were included, as that appeared to enhance the value of her card-packs for identification purposes'

(para. 4) seems patronizing. What identification guide would not be enhanced by figures of type specimens, particularly some never before figured photographically and others never before figured at all? Kaicher knows the importance of illustrating types as aids to identification, and she has strived to include such figures for many shells. The contention 'suppression of her work ... would have no effect on their utility for shell collectors *which, after all, was the purpose of her card-packs* [my italics]' (para. 9) is egregious nonsense. Many curators and other malacologists have helped and co-operated with Kaicher's project. Their willingness to search out and photograph types or, more often, to loan types to be photographed, testifies to their regard for the scientific usefulness of the work. It is remarkable that Kabat pretends otherwise.

This catalogue is an important contribution to malacology. Kabat fails to mention that Kaicher has correctly figured and properly identified as holotypes, syntypes, lectotypes, paratypes, etc. the type specimens of hundreds of species, some for the first time and many better than previously done. Kilburn (1985, p. 241) called Kaicher's card catalogue 'perhaps the most valuable modern contribution to knowledge of the EPITONIIDAE ... which provides excellent photographs of many type specimens'. In text references, Kilburn cited the cards for figures of holotypes or syntypes of more than a dozen species-level taxa, and he designated lectotypes for three taxa, specifying them to be specimens figured by Kaicher. In his synonymies, he also cited other cards for figures of types or reclassification actions. Kilburn evidently concurred with Kaicher that figures of types enhanced the value of the card-packs. A quick but incomplete list of others who have found value in the work includes Cernohorsky (1984) and De Jong & Coomans (1988).

The unsubstantiated claim that 'although sets of this work are present in the Mollusk libraries of several natural history museums, none has been formally catalogued' (para. 3) understates the accessibility as well as the importance of this work. Sets of the card catalogue reside in most centers of malacological research in the United States and in the Library of the National Museums of Canada, Ottawa. A brief, partial list of European repositories of the card catalogue includes The Natural History Museum, London; Laboratorie de Biologie des Invertébres Marins, Paris; Institut Royal des Sciences Naturelle de Belgique, Bruxelles; and Muséum d'Histoire Naturelle, Département des Invertébres, Geneva. Sets of the card catalogue are present in The Australian Museum, Sydney, and in most of the State museums of Australia; sets also reside in museum libraries in Asia (Japan), Africa (South Africa), and South America (Brazil). Kabat does not explain how he determined that none of these sets has been 'formally catalogued', but the issue of book-keeping is minor and should not influence the greater issue of accessibility. Clearly, the work is widely distributed and accessible to professional malacologists.

These are not trading cards for shell collectors. In addition to names and pictures of shells, the cards contain distributional and diagnostic text, often with comparative remarks on similar species. Kaicher has provided original conclusions on classification, reassigned taxa, proposed original synonymies, and refuted some proposed by others, usually supporting her arguments with photographs of type specimens. She has illustrated protoconchs for hundreds of species, many figured from types. Most protoconchs have been figured photographically but many have been drawn, a testament to her skill as an illustrator — she was formerly a biological illustrator at

the Academy of Natural Sciences of Philadelphia and later at the Smithsonian Institution where, among other projects, she illustrated gastropods for the *Treatise on Invertebrate Paleontology* (Knight et al., 1960). The figures of protoconchs are of great value to science but of little interest to most amateurs. Moreover, although some card-packs simply summarize information gathered from scattered sources, others constitute original revisionary work. Especially important are Kaicher's contributions on NASSARIIDAE (packs 31, 34, 41; 1982, 1983, 1985) and OLIVIDAE (packs 33, 49, 51, 54; 1982, 1987, 1988, 1989). The first nassariid pack was acknowledged as monographic by Cernohorsky (1984), and the *Oliva* cards have been cited by several authors. Kaicher's work on *Olivella* constitutes the most comprehensive modern synthesis of the group and represents a considerable improvement over its predecessors (e.g. Olsson, 1956). Lectotype designations, intended or not, are appropriate in such work.

Kabat's statement 'Kaicher does not appear to have researched the literature or status of the supposed type specimens which she illustrated' (para. 5) is another assumption with scant basis in fact. In addition to examining type specimens, Kaicher has consulted original descriptions as well as revisionary works for many of the taxa she treated. In scores of instances, she has identified the repository of the specimen in a manner intended to avoid type designations (e.g. 'BMNH type collection [number]'). In other cases, she uses the word 'type' in quotes (e.g. 'type', USNM) in the meaning of syntype (as has been done in Article 73b(i) of the Code) to signify no more than indication that the specimen bears that label in the collection at that museum; this usage is distinguished from 'the type', which would constitute a lectotype designation (Article 74a). Kabat's examples confirm that Kaicher did not always ascertain the status of supposed types correctly, but to speculate that she did not research the literature or consider the status of types is contrary to fact.

Some of the problems perceived by Kabat are trivial, especially his complaint of typographic errors among listed museum catalogue numbers; such errors can be found in most major works, and this is a major work, treating more than 6000 taxa and providing hundreds, if not thousands, of catalogue numbers. Also inconsequential, and perhaps a bit disingenuous, is Kabat's complaint (para. 7.1) that 'it cannot be determined' which of two lots containing a total of nine specimens included a 'type' specimen of *Nassarius* figured by Kaicher. Most shells, and certainly those of *Nassarius*, are like fingerprints — no two are quite alike. Given the high quality of Kaicher's photographs, including the figure cited by Kabat, a properly motivated person should have little difficulty finding the figured shell. This is not an important issue.

An issue raised by Kabat (para. 7.2) that is important involves designations of ineligible specimens as types; the extent of this problem in Kaicher's work is unknown, but there is no evidence to indicate that cases are common. Nevertheless, a simple remedy for the problem is prescribed — when a designated lectotype is demonstrated to have been based on ineligible material, it loses its status as lectotype (Article 74a(v) of the Code). Errors, when detected, should be pointed out and corrected.

The principal issue here involves Kaicher's inadvertent but 'potentially valid' designation of lectotypes from among eligible syntypes. In most instances these designations arose not from Kaicher's neglect of literature but from the fact that

specimens she figured had already been identified as types and segregated in type collections of some of the world's major museums. Furthermore, she figured and identified these specimens with the co-operation and encouragement of curators at those museums, who seem to have been similarly uninformed of the status of the specimens in their charge. Curators often loaned 'types' to be photographed or provided photographs of specimens and informed her of their 'type' status. In other words, the status of many specimens, correctly or not, had been pre-selected by the curators or their predecessors at those museums, and no one questioned those selections until recently, when the issue was raised in conversations that have led to this proposal. This problem, seldom acknowledged in print, exists at museums on several continents and is sometimes associated with taxa whose material was distributed among several museums (e.g. Kilburn, 1985, pp. 291–292). The 'formalization' in taxonomic papers of such selections, although contrary to recommendations of the Code, is not uncommon and has generally been accepted. Several examples exist where lectotypes for Dall's species have been designated inadvertently by recent workers other than Kaicher (e.g. Abbott & Dance, 1982); are all of these works to be suppressed?

There is nothing ambiguous about the intent of Kaicher's card catalogue, nor of the regard it has been accorded by many curators and other malacologists who have aided the effort and cited the work; all have recognised its value to the permanent scientific record. To suppress Kaicher's inadvertent but legal lectotype designations, review again the literature, re-examine the material and make new designations would create confusion while almost certainly producing identical results in the majority of cases. To suppress this valuable work because it includes some errors of intent (but far fewer errors of fact) would be counterproductive. The work should be allowed to stand and be recognized as a valuable contribution to malacology. Its factual errors can be corrected when detected, and science can move forward.

Additional references

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Kilburn, R.N. 1985. The family Epitoniidae (Mollusca: Gastropoda) in southern Africa and Mozambique. *Annals of the Natal Museum*, **27**(1): 239–337.

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(3) José H. Leal

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I am writing to request that the Commission does not take the action proposed by Kabat. According to him, Kaicher casually or accidentally selected a few lectotypes from syntype lots deposited in different museums. Unfortunately, these actions are

valid according to the Code. Kaicher's type designations can be clarified and emended by Kaicher herself in future printings or editions of those specific cards or by other researchers working in the distinct molluscan groups involved.

Kaicher's card catalogue has been an extremely useful tool both for collection management and scientific research purposes. Rejecting Kaicher's lifetime work solely for the reasons defended by Kabat is a perfect example of 'throwing away the baby with the bath water'. Due to purely probabilistic reasons, it is inevitable that any compilation of zoological taxa involving figures that reach several thousand species (Kaicher's work already exceeds 6000 cards) will introduce mistakes of some sort. The professional literature on mollusks evidently is no exception to that. I can think of three or four major works published in the last 25 years that show problems of a similar nature, but which were never selected for rejection, probably because they were written by professional malacologists.

I submit that Kaicher's work should not be singled out and rejected for nomenclatural purposes by the Commission. My request is based on the specific reasons cited above and, in a broader sense, seeks to discourage censorship of the kind proposed by Kabat.

(4) A.R. Kabat

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I am writing in response to comments on this case published above and in BZN **53**: 273–277 (December 1996). The comments in support by various colleagues — Beu, Bouchet, Finet, Kohn and Schiøtte — indicate the significant doubt existing among professional malacologists regarding Kaicher's card-packs. Furthermore, Kohn has emphasized the additional problem of Kaicher having used unpublished manuscript species names in her card-packs, and that Kaicher specifically assured him that she had no intent of publishing new names or that her card-packs be taken as part of the scientific record.

The criticisms written by several other colleagues have missed the fundamental point of my proposal, i.e. that Kaicher's work would be suppressed solely for nomenclatural purposes. This will have no effect whatsoever on its significant value for identification and curatorial purposes, and the excellent photographs in this work can and will continue to be cited by malacologists in their systematic publications. Suppression of this work for nomenclatural purposes is not a value judgment, nor does it represent 'censorship' (contrary to Leal's assertion) since these card-packs will remain readily available to all and can be referenced for their high-quality illustrations.

An analogous example would be the first 11 volumes of the first edition of Martini & Chemnitz, *Neue Systematisches Conchylien-Cabinet* (1769–1795), suppressed for nomenclatural purposes in 1954; despite its suppression, this work remains widely cited and used precisely because of its fine illustrations of shells. Its suppression for nomenclatural purposes has had no effect on the value of this work to systematists and bibliophiles. Similarly, suppression of Kaicher's card-packs for nomenclatural purposes means that her cards will still be an extremely useful tool for collection management and scientific research purposes — precisely the original rationale for these cards.

Several of the criticisms warrant a response on my part:

(1) Lyons remarks that Kaicher will 'correct and update' these card-packs, and Leal remarks that her type designations 'can be clarified and emended by Kaicher herself'. However, any disclaimer of her intent cannot be made retrospectively, and her designations of lectotypes, if they are taken to be valid, remain unless or until the Commission rules that the work is suppressed for nomenclatural purposes or that such designations are deemed not to be valid. It is good to know that Kaicher's work will be resumed, and I look forward to the reprinting of the card-packs, or reissue in a CD-ROM version; alternatively republication on the Internet (World Wide Web) would also ensure the wide distribution of Kaicher's photographs.

(2) Vokes states that 'the act of figuring a shell and calling it a lectotype is not, to me, a valid designation of a lectotype'. If this were correct, then one of the problems raised by Kaicher's card-packs would disappear. However, Article 74 of the Code provides that use of the term lectotype or an equivalent expression (e.g. 'the type') or a statement or inference 'that one original specimen is the holotype or the type' represents a valid lectotype designation.

(3) Lyons questions my remark that the card-packs have not been formally catalogued by libraries. I should clarify and expand upon my earlier statement to emphasize that I was specifically referring to the practice of North American research libraries not only to assign call numbers to catalogued publications, but also to make these library records available online (through 'OCLC') for the purposes of Inter-Library Loan. At the time I wrote my proposal, there were no such online records in OCLC of Kaicher's card-packs, as confirmed by the Smithsonian Institution Libraries office in charge of Inter-Library Loans. This means that North American researchers or shell collectors whose local library did not have Kaicher's card-packs would have been unable to borrow this work or obtain photocopies of it through normal library loan procedures. Harasewych & Petit state that Kaicher's *Card Catalogue* 'has been catalogued by the Smithsonian Libraries', but this was not done until 29 August 1996, two months after publication of my proposal and presumably in response to my noting its absence in such library catalogues. It is good to know that Kaicher's card-packs are finally available to researchers at other North American libraries through Inter-Library Loan procedures.

(4) Harasewych & Petit remark, as does Leal, that certain other publications on mollusks also contain similar type designations; however, most of these publications differ in that they are expressly part of the scientific record for nomenclatural purposes (all but one cited by Harasewych & Petit contain new species-level taxa, and some also have new genus-level taxa), and they have usually been recognized by malacologists for their lectotype designations. In contrast, I am unaware of any printed publication (as of November 1996) which cites a Kaicher lectotype designation; indeed, in my 1994 correspondence with several professional malacologists while preparing this proposal, none even knew that her card-packs had potential lectotype designations.

(5) Harasewych & Petit discuss a possible source of some of these problems, i.e. the 1942 curatorial activities at the Smithsonian Institution necessitated by the need to move type specimens away from the museum during World War II. This information, while historically interesting, has no bearing on the validity of Kaicher's actions. Harasewych & Petit refer to the actions taken at that time as 'constituting the

actual selections of 'lectotypes' for the species in question, although not formalized by a published statement of such action', but these curatorial activities are not nomenclatural acts. Harasewych & Petit also claim that the then-curators were able to select 'illustrated specimens or specimens best conforming to the published descriptions' for removal to safe storage. Harasewych & Petit do not mention that Drs Morrison and Rehder had only a few months to select and remove 14,663 lots (over one hundred lots per day) from the world's largest mollusk collection. It is difficult to believe that, given these time constraints, the original descriptions (let alone illustrations, dimensions and type localities) could have been checked for so many species described in over 500 publications. Indeed, while researching certain types from the *Blake* and *Albatross* expeditions, I found various lots in the Smithsonian mollusk type collection which they had segregated, labeled and catalogued as 'holotypes', but which in fact were not types as they were not from the type locality; instead, syntypes in the general collection represented actual type material.

In conclusion, the various criticisms of the proposal to suppress Kaicher's card-packs for nomenclatural purposes bring up irrelevant issues, misinterpret the provisions of the Code regarding lectotype designations, and overlook the fundamental fact (as pointed out in my original application) that suppression will have no effect whatsoever on the value of Kaicher's card-packs to both malacologists and shell collectors. This work will remain widely used and cited precisely because of its excellent illustrations and will remain an important contribution to this field. Suppression will merely eliminate the problems raised by Kaicher's wholly inadvertent lectotype selections, as well as those raised by her publication of manuscript species names, and will conform to her intent that these card-packs are not part of the scientific record for nomenclatural purposes.

Comment on the proposed conservation of the specific names of *Arca pectunculoides* Scacchi, 1834 and *A. philippiana* Nyst, 1848 (currently *Bathyarca pectunculoides* and *B. philippiana*; Mollusca, Bivalvia)
(Case 2977; see BZN **53**: 173–177)

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This case is an excellent example of when an older name should be rejected.

1. Misidentification of the original description and type material has led to incorrect use of the specific name of *Arca grenophia* Risso, 1826 for *Bathyarca pectunculoides* (Scacchi, 1834), a well known species (para. 5 of the application).

2. As an older synonym of *Bathyarca philippiana* (Nyst, 1844), the name *grenophia* is a threat against this quite well known name (para. 6).

3. A strict application of priority would switch the use of the name *grenophia* to *Bathyarca philippiana*. Much confusion would result since without a lengthy explanation it would be ambiguous which of the two species (*pectunculoides* or *philippiana*) was referred to.

4. A swift rejection of *grenophia* will mean that all modern use of the name will relate to the one taxon, *B. pectunculoides*.

Comments on the proposed conservation of the specific name of *Parapronoe crustulum* Claus, 1879 (Crustacea, Amphipoda)
(Case 2992; see BZN **53**: 178–181)

(1) Wolfgang Zeidler

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I wish to provide updated information in regard to the above application and also to address some concerns drawn to my attention by Prof L.B. Holthuis regarding the selection of a lectotype for the nominal species *Typhis rapax* Milne-Edwards, 1830.

My application was made as a result of my studies of material labelled as *Typhis rapax* held by the Muséum National d'Histoire Naturelle, Paris and the Zoologisk Museum, Copenhagen University (Zeidler, 1996). I determined that the Paris Museum has two syntype specimens of *Typhis rapax* which upon examination proved to be the same as *Parapronoe crustulum* Claus, 1879. These I selected as lectotype and paralectotype of *T. rapax* (Zeidler, 1996). I took this course of action for the following reasons:

1. The specimens in the Paris Museum are almost certainly syntypes, judging by the accompanying labels and published information.

2. The original description of *Typhis rapax* is consistent with that of *Parapronoe crustulum* Claus, 1879 but not of *Hemityphis tenuimanus* Claus, 1879 with which it has been synonymised since Stephensen (1925).

3. I have examined the specimen of '*Typhis rapax*' in the Copenhagen Museum (CRU-668) referred to by Stephensen (1925). It is clearly the same as *Hemityphis tenuimanus*. It may represent syntype material but there is little supporting evidence other than that the specimen was presented to the Copenhagen Museum in Kröyer's time by Milne-Edwards. The label with the specimen reads 'Typhis rapax M.E., Atlanterhav Milne-Edw. Kr.'.

As a result of my investigations, outlined above, I rejected the possibility of selecting the Copenhagen specimen as a lectotype of *T. rapax* and thus conserving both the names *crustulum* and *rapax* in their accustomed senses. Consequently I found it necessary to make my submission to the Commission for the suppression of the name *rapax*. I had hoped that publication of my paper (Zeidler, 1996) would precede that of my submission to the Commission but they were eventually published at about the same time.

Reference

Zeidler, W. 1996. On the identity of *Typhis rapax* H. Milne-Edwards, 1830 (Amphipoda, Hyperiidea). *Crustaceana*, **69**(6): 734–741.

(2) L.B. Holthuis

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In the light of the facts outlined above by Dr Zeidler, I support his proposal to the Commission as being the best means of preventing the switch of the specific name *rapax* from *Hemityphis tenuimanus* to *Parapronoe crustulum*.

Comment on the proposed conservation of the specific names of *Aphodius rufus* (Moll, 1782), *A. foetidus* (Herbst, 1783) and *Aegialia rufa* (Fabricius, 1792) (Insecta, Coleoptera)

(Case 2878; see BZN **51**: 121–127, 340–341; **52**: 71–73; **53**: 123–125, 191)

Giovanni Dellacasa

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Since the appearance (BZN **51**: 340–341) of my first comment on this application three sets of further comments have been published (from Dr Silfverberg, Dr Krell and Dr Stebnicka in BZN **52**: 71–73; from Dr Szwałko and Dr Krell in BZN **53**: 123–125; and from Dr Král in BZN **53**: 191).

It is not necessary to look again into the irrefutable validity of the specific names of *Dischista rufa* (De Geer, 1778) and *Aegialia spissipes* LeConte, 1878, but proposals (1) on the names *Aphodius scybalarius* (Fabricius, 1781) and *A. foetidus* (Herbst, 1783); and (2) on *A. rufus* (Moll, 1782) and *A. arcuatus* (Moll, 1785) merit further discussion.

1. The specific name of *Aphodius scybalarius* (Fabricius, 1781) was misapplied to *A. foetidus* (Herbst, 1783) without any exception for more than 150 years, until Landin (1956, p. 213) established on a revision of type material that *scybalarius* was identical with the taxon long known as *A. rufus* (Moll, 1782). He (p. 214) designated a lectotype for *scybalarius*, recording that it was a strongly melanic specimen of the taxon.

I propose that Landin's (1956) lectotype designation for *scybalarius* be set aside and that this name be accepted in accord with its long use in the taxonomic sense of *foetidus*.

In my (1983) monographic work on Italian APHODIINI, mentioned by Krell in his comment (BZN **53**: 124–125), although I completely agreed with Landin's view (1956, p. 225) that the name *rufus* (Moll, 1782) should be conserved since 'an alteration of the nomenclature on this point would involve great confusion of ideas', I considered that I was compelled to adopt the name *scybalarius* for the taxon. This was in accord with Silfverberg (1977), who had strictly applied the principle of priority. Landin wrote to me at the time that he had not actually submitted a proposal to the Commission to conserve the name *rufus* Moll (see the application, para. 3).

2. The synonymy of the names *Aphodius rufus* (Moll, 1782) and *A. arcuatus* (Moll, 1785) was recorded by 19th century authors. Harold (1871, p. 120) established that *arcuata* was a junior synonym of *rufus* on the basis of Moll's types, and Stein & Weise (1877, p. 194) noted '*Aphodius arcuatus* (Moll, 1785) = *Aphodius rufescens* Fabricius, 1801 = *Aphodius rufus* (Moll, 1782)'.

I now affirm my proposals to the Commission that (1) the name *Aphodius scybalarius* (Fabricius, 1781) be accepted in the sense of *A. foetidus*, and (2) *A. arcuatus* (Moll, 1785) be adopted in place of the junior homonym *A. rufus* (Moll, 1782).

Additional references

Harold, E. 1871. Berichtigungen und Zusatze zum Catalogus Coleopterorum Synonymicus et Systematicus. *Coleopterologische Hefte* (München), **8**: 117–123.
Stein, J.P. & Weise, J. 1877. *Catalogi Coleopterorum Europae*. 209 pp. Berlin.

Comment on the proposed designation of a replacement neotype for *Alcyonidium mytili* Dalyell, 1848 (Bryozoa)

(Case 2961: see BZN **53**: 92–95)

Jean-Loup d'Hondt

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J'ai pris connaissance du cas 2961 proposant la remplacement du néotype du Bryozoaire *Alcyonidium mytili* Dalyell, 1848 que le professeur Goyffon (maintenant en retraite) et moi-même avions désigné en 1992 à partir d'une population française. Je suis tout à fait d'accord avec le principe de ce remplacement.

Nos collègues de l'Université de Swansea ont en effet demandé qu'il lui soit substitué un nouveau néotype, de provenance géographique plus proche de la localité d'origine présumée du matériel original de Dalyell (celui-ci avait été recueilli en Ecosse sans indications plus précises). Ils ont donc présenté leur demande de remplacement du premier néotype par un second qu'ils ont désigné, après avoir eux-mêmes trouvé en Ecosse un morphotype correspondant à la description de Dalyell, mais appartenant à une espèce différente de celle présente en France (mode de reproduction et type larvaire différents); ceci impliquait que l'espèce récoltée en Ecosse ait davantage de chances que l'espèce trouvée en France de correspondre à l'espèce décrite par Dalyell.

Dans le cadre de la révision générale des *Alcyonidium* que j'ai entreprise depuis une vingtaine d'années et qui a fait l'objet depuis lors d'un certain nombres publications, j'avais montré que le binôme '*Alcyonidium mytili*' correspondait en réalité à au moins trois espèces différentes en Europe (France, estuaire du Rhin, Suède), et peut-être même à davantage. Vu qu'aucun spécimen-type n'avait été désigné et qu'on ne connaissait aucun spécimen de cette espèce récolté par Dalyell, il s'est alors posé pour moi le problème de la désignation d'un néotype à partir d'un matériel biologique d'une autre origine. J'ai effectué à deux reprises des séjours en Ecosse afin d'essayer de retrouver des spécimens susceptibles de correspondre à la description de Dalyell, mais ce fut en pure perte, et je n'en ai récolté aucun. Les échantillons britanniques que j'avais vus dans différentes collections n'étaient pas très utilisables; j'avais complètement utilisé pour d'autres travaux de recherche mes spécimens du Rhin et de Suède. Or des populations correspondant parfaitement, par leur morphologie, leur anatomie et leur écologie, aux descriptions d'*A. mytili*, tant des auteurs français (Le Brozec, Matricon, Prenant et Bobin) que britanniques (Hayward), existaient en plusieurs points du littoral français et j'avais pu les observer *in vivo*: à Roscoff (population dont j'avais étudié les larves voici environ 25 ans à l'occasion de ma thèse de doctorat, mais où les spécimens étaient devenus très rares depuis lors), Luc-sur-Mer (ou l'espèce a presque complètement disparu entre 1985 et 1990) et Montsarrac (seule localité où l'espèce est toujours très abondante). Comme il apparaissait alors indiscutable que les

spécimens français et britanniques devaient appartenir à la même espèce, le professeur Goyffon - en collaboration avec lesquel j'ai fait cette étude - et moi-même avons donc désigné, faute de mieux, un néotype de la population de Montsarrac.

Les spécimens recueillis en Grande-Bretagne par les Drs Ryland et Cadman ne présentent que de minimes différences morphologiques avec la description classique d'*A. mytili*, mais semblent présenter une grande variabilité anatomique intraspécifique, supérieure à ce qui est habituellement le cas chez les *Alcyonidium*; ils se différencient surtout par leur mode de reproduction et leur type larvaire des '*A. mytili*' français. Les spécimens de Roscoff incubent leurs larves jusqu'à ce qu'elles atteignent leur morphologie et leur forme définitives; ces larves, lécitotrophes, à tube digestif dégénéré durant l'emryogenèse, sont nues, de forme cylindrique, à corona locomotrice équatoriale et sillon palléal invaginé. Les spécimens de Grande-Bretagne sont ovipares (leur embryologie n'a pas été publiée) et le développement s'effectue probablement en pleine eau; les larves mûres sont comprimées latéro-latéralement, sont bivalves, de forme triangulaire, et contiennent un tube digestif complet et apparemment fonctionnel; elles correspondent morphologiquement au type 'cyphonautes' qui caractérise au moins deux familles de Cheilostomes ainsi que certains Cténostomes dont le développement n'a été qu'incomplètement étudié. Les deux espèces, française et britannique, connues sous le même nom d'*A. mytili*, correspondent donc en fait à deux espèces distinctes et confondues dans la littérature.

En conséquence, il est plus logique de supposer que l'espèce recueillie par les Drs Ryland et Cadman appartient plus vraisemblablement à l'espèce nommée par Dalyell que l'espèce présente en France, même si on ne pourra jamais en avoir la certitude absolue. Par suite, il apparaît donc effectivement plus judicieux que le néotype d'*A. mytili* soit désigné à partir de l'espèce existant en Ecosse qu'à partir de celle, différente, trouvée en France. Aussi ne vois-je aucun inconvénient à ce que le néotype que le professeur Goyffon et moi-même avions désigné à partir de l'espèce française soit invalidé, et remplacé par un nouveau néotype d'origine écossaise.

Lors d'un récent échange de correspondances avec le Dr Ryland, je lui ai déjà indiqué que j'étais d'accord avec son projet. Dans sa réponse, il m'a proposé de publier en collaboration avec lui, si le matériel français appartenait la même espèce que des spécimens vivipares qu'il venait lui-même de rencontrer en Grande-Bretagne, la description de cette espèce jusqu'ici confondue avec le probable 'vrai' *A. mytili*, et de les publier indépendamment chacun de notre côté s'il s'agissait d'espèces différentes. Je lui ai donné mon accord, en lui proposant que, même s'il y avait deux espèces vivipares, l'une française et l'autre britannique, nous pourrions aussi les décrire ensemble, puisque nos travaux concernaient le même matériel biologique et que nos programmes respectifs de recherche étaient convergents.

Comment on the proposed designation of *Atrypa laevis* Vanuxem, 1842 as the type species of *Meristella* Hall, 1859 (Brachiopoda)

(Case 3003; see BZN **53**: 182–183)

(1) A.J. Boucot

Department of Zoology, Oregon State University, 3029 Cordley Hall, Corvallis, Oregon 97331–2914, U.S.A.

I strongly support Alvarez's proposal that *Atrypa laevis* be designated the type species of *Meristella*, as it has for very many years been the basis of the concept of *Meristella*. The original type species by monotypy, *Atrypa naviformis* Hall, 1843, is very poorly known. I write as one who has used *Meristella* in his work for many years and who was the senior author for the section on retrospiroides, including *Meristella*, in the first edition of the *Treatise on Invertebrate Paleontology*; I confirm that *M. laevis* was what we had in mind when describing *Meristella*.

(2) C.H.C. Brunton

Palaeontology Department, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

I have read with interest Alvarez's application, and regard it as sound and worthy of support.

(3) A.D. Wright

School of Geosciences, Queen's University of Belfast, Belfast BT7 1NN, Northern Ireland, U.K.

I am writing to express support for Alvarez's application; this will provide stability to what has been an accepted situation for a long time, particularly since the publication of the 1965 *Treatise* volume.

Comment on the proposed conservation of the specific name of *Hemidactylus garnotti* Duméril & Bibron, 1836 (Reptilia, Squamata)
(Case 2960; see BZN **53**: 184–186)

Hidetosho Ota

Tropical Biosphere Research Center, University of the Ryukyus, Nishihara, Okinawa 903–01, Japan

I am in full support of the application to conserve the specific name of *Hemidactylus garnotii* Duméril & Bibron, 1836 by suppressing the specific name of *H. peruvianus* Wiegmann, 1835.

The name *garnotii* has been repeatedly used in most, if not all, relevant publications, including several taxonomic and genetic papers published subsequent to Bauer & Henle (1994) (para. 6 of the application). Among these are Ota, Lau & Bogadek (1995) and Ota et al. (1996).

Adoption of the name *H. peruvianus* would be seriously confusing, not only to systematists but also to geneticists dealing with this clonal gecko. I believe that, in consideration of the stability of nomenclature, an exception to priority is warranted under Article 79c of the Code.

Additional references

Ota, H., Hikida, T., Matsui, M., Chan-Ard, T. & Nabhitabhata, J. 1996. Discovery of a diploid population of the *Hemidactylus garnotii-vietnamensis* complex (Reptilia: Gekkonidae). *Genetica*, **97**(1): 81–85.

Ota, H., Lau, M.W. & Bogadek, A. 1995. Taxonomic status of the Hong Kong populations of the *Hemidactylus garnotii-vietnamensis* complex (Gekkonidae: Reptilia). *Zoological Studies*, **34**(2): 126–130.

Comment on the proposed conservation of some mammal generic names first published in Brisson's (1762) *Regnum Animale*

(Case 2928; see BZN **51**: 135–146, 266–267, 342–348; **52**: 78–93, 187–192, 271–275, 347–350; **53**: 191–192, 278–286)

Jorge J. Cherem

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I found this application most informative.

In my view there is every reason to conserve Brisson's (1762) generic names for mammals when the Commission has already conserved *Odobenus* Brisson, 1762 and some of Brisson's (1760) names for birds.

The mammal names *Philander*, *Pteropus*, *Glis*, *Cuniculus*, *Hydrochoerus*, *Meles*, *Lutra*, *Hyaena*, *Tapirus*, *Tragulus* and *Giraffa* have been in use for many years and are in current use. The Code urges stability and I believe that these 11 names, and only these, should be formally accepted from Brisson (1762).

The timing of voting on applications to the Commission

In Opinions 1861, 1866 and 1867 published in the present issue of the *Bulletin* it is noted that Commissioner Dupuis abstained from voting on the ground that less than a year had elapsed between publication of the last comment on each of the applications and the case being sent for voting; Professor Dupuis has asked that his reason for abstention be recorded. Had such an interval been implemented none of these Opinions could have been published before March 1998, and it may be helpful to readers if I explain the procedure which has long been adopted in determining when published applications are submitted to Commissioners for voting.

As stated on the first page of every issue of the *Bulletin* 'the Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted'. A balance has to be struck between haste preventing a considered response by zoologists to applications (or to comments on them) and, on the other hand, undue delay, which not only causes uncertainty but also can exacerbate existing nomenclatural problems.

In practice the shortest period between publication of an application and sending it to the Commission for voting is eight months, but such an interval only applies if the case appears straightforward and most unlikely to meet with any contrary view. Two intrinsic safeguards always lengthen the effective period for receipt of comments. The first safeguard is that the voting procedure lasts three months, and the second is that the Opinion incorporating the Commission's ruling is not committed for publication in the *Bulletin* until more than two months after completion of voting. Thus a decision is never finalised until more than 13 months after the publication of even the most simple case. If, contrary to expectations, a comment from a zoologist which raises a substantial issue were to be received within the voting period or in the following two months it would be published, a ruling would be postponed and the application would be reconsidered by the Commission. However, no instance of this being necessary has occurred in at least the past ten years.

Complex applications, and in particular those where opposing comments have been received or are anticipated, are not submitted for voting as rapidly as given above. Comments (which sometimes include alternative proposals) are published in the *Bulletin*, and the Commission is asked to vote on the applications only after a period adequate for zoologists to make further responses for publication. The period between publication of a 'comment' and the start of the voting procedure depends on the nature of the comment and of previous ones (if any), and whether further discussion is expected; it would not be reasonable for simple statements of support to delay a vote. If any comments are received too late for publication they are reported to the Commission on the voting papers if this is possible, and they are always mentioned in the Opinion on the case. In every instance the safeguards described above apply: substantive comments received within the voting period and a further two months would lead to postponement of the Opinion and reconsideration by the Commission if this were appropriate.

Debate is never stifled, and in cases where a diversity of view is apparent the application (and alternative proposals, if any have been put forward) is not submitted for voting until it appears very probable that the flow of comments has ended.

During its meetings in Budapest in August 1996 the Commission considered whether the established procedure which is outlined above gave sufficient time for consideration of applications and comments. Recognising that the zoological community has a right to expect reasonably speedy consideration of applications once published, it was agreed that the practice described in this note was adequate to ensure that rulings were given in the light of all the evidence likely to become available and that further delays of arbitrary length would not be justified.

P.K. TUBBS
Executive Secretary

OPINION 1860

Acanthoteuthis Wagner in Münster, 1839 and *Muensterella* Schevill, 1950 (Mollusca, Cephalopoda): placed on the Official List

Keywords. Nomenclature; taxonomy; Mollusca; Cephalopoda; *Acanthoteuthis*; *Kelaeno*; *Muensterella*.

Ruling

(1) The following names are hereby placed on the Official List of Generic Names in Zoology:
   (a) *Acanthoteuthis* Wagner in Münster, 1839 (gender: feminine), type species by subsequent designation by Bülow-Trummer (1920) *Acanthoteuthis speciosa* Münster, 1839;
   (b) *Muensterella* Schevill, 1950 (gender: feminine), type species by subsequent designation by Bülow-Trummer (1920) for the replaced nominal genus *Kelaeno* Münster, 1842, *Kelaeno arquata* Münster, 1842.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:
   (a) *speciosa* Münster, 1839, as published in the binomen *Acanthoteuthis speciosa* (specific name of the type species of *Acanthoteuthis* Wagner in Münster, 1839);
   (b) *arquata* Münster, 1842, as published in the binomen *Kelaeno arquata* (specific name of the type species of *Muensterella* Schevill, 1950).

(3) The name MUENSTERELLIDAE Roger, 1952 (1921) (type genus *Muensterella* Schevill, 1950) is hereby placed on the Official List of Family-Group Names in Zoology.

(4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
   (a) *Kelaeno* Münster, 1839 (unavailable because not published as a valid name);
   (b) *Kelaeno* d'Orbigny, 1841 (a junior objective synonym of *Acanthoteuthis* Münster, 1839);
   (c) *Kelaeno* Münster, 1842 (a junior homonym of *Kelaeno* d'Orbigny, 1841);
   (d) *Celaeno* Wagner, 1860 (a junior objective synonym of *Kelaeno* Münster, 1842 and a junior homonym of *Celaeno* Rafinesque-Schmaltz, 1815);

(5) The following names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology:
   (a) KELAENIDAE Naef, 1921 (invalid because the name of its type genus, *Kelaeno* Münster, 1842, is a junior homonym);
   (b) CELAENIDAE Naef, 1922 (an incorrect subsequent spelling of KELAENIDAE Naef, 1921).

History of Case 2902

An application to conserve the usage of the generic names *Acanthoteuthis* Wagner in Münster, 1839 and *Kelaeno* Münster, 1842 was received from Prof D.T. Donovan

(*University College London, London, U.K.*) on 5 August 1993. After correspondence the case was published in BZN **51**: 219–223 (September 1994). Notice of the case was sent to appropriate journals.

Further information relevant to the application was supplied by the author in BZN **52**: 65 (March 1995).

Comments in support from Dr W. Riegraf (*Münster, Germany*) and from Dr Marion Nixon (*Birkbeck College, London, U.K.*) were published in BZN **52**: 65.

A comment from Dr Theo S. Engeser (*Institut für Paläontologie, Freie Universität Berlin, Berlin, Germany*), also published in BZN **52**: 65, supported the placement of the name *Acanthoteuthis* Wagner in Münster, 1839 on the Official List but opposed the conservation of *Kelaeno* Münster, 1842. He pointed out (para. 6 of his comment) that since 1950 authors had adopted *Kelaeno* Münster and its replacement *Muensterella* (published as *Münsterella*) Schevill, 1950 (p. 117) in equal numbers. Engeser proposed that *Kelaeno* Münster should be rejected as a junior homonym of *Kelaeno* d'Orbigny, 1841 and that *Muensterella* should be adopted. He added that it would be 'preferable' to replace KELAENIDAE Naef, 1921 by MUENSTERELLIDAE Roger, 1952 (1921).

In March 1995 the author of the application was asked if he wished to reply to Dr Engeser's comment on *Kelaeno*. Prof Donovan replied (in litt., August 1995): 'I think I am content to let matters take their course'.

The application was sent to the Commission for voting on 1 December 1995. It was noted on the voting paper that if it was not approved by a two-thirds majority of the votes, so that *Kelaeno* d'Orbigny, 1841 was not suppressed, *Muensterella* Schevill, 1950 (and not *Kelaeno* Münster, 1842) and MUENSTERELLIDAE Roger, 1952 (1921) would be placed on Official Lists, and *Kelaeno* d'Orbigny, 1841 (a junior objective synonym of *Acanthoteuthis* Münster, 1839 by Engeser's 1987 type species designation) and *Kelaeno* Münster, 1842 (a junior homonym of *Kelaeno* d'Orbigny, 1841) would be placed on the Official Index.

It was also noted that, whatever the outcome of the voting, it was proposed that the name *Celaeno* Wagner, 1860, an unjustified emendation (junior objective synonym) of *Kelaeno* Münster, 1842 (paras. 4 and 5 of Engeser's comment) and a junior homonym of *Celaeno* Rafinesque-Schmalz, 1815 (para. 3 of the application) be placed on the Official Index in addition to the names listed in para. 12(4) of the application.

The Commission approved (18 votes in favour, 8 against) the proposal to place *Acanthoteuthis*, and that of its type species *Acanthoteuthis speciosa* Münster, 1839, on Official Lists. The proposal to conserve *Kelaeno* Münster, 1842 by suppressing the senior homonym *Kelaeno* d'Orbigny, 1841 received a majority (17 votes in favour, 9 against) but failed to reach the required two-thirds majority for approval.

A number of Commissioners commented on their voting papers. Bock noted: 'I urge that the final ruling on this case includes a statement to clarify which are the valid family-group names. This is not at all clear to me'. Bouchet commented: 'No action by the Commission is necessary for the name *Acanthoteuthis*. Engeser has very convincingly demonstrated that *Kelaeno* and *Muensterella* have been cited in a few publications only and therefore there is no widespread usage to conserve. The principles of priority and homonymy should apply' [i.e. *Kelaeno* Münster, 1842

should be rejected as a junior homonym]. Lehtinen commented: 'There are no reasons to deviate from the Code in the case of *Kelaeno*. Dr Engeser has presented a solution and nothing need be added or altered'. Cogger, Hahn and Minelli also commented that they were persuaded by Dr Engeser's arguments.

Under the Bylaws the proposal to conserve the name *Kelaeno* Münster, 1842 required a revote. Completion of the voting on *Kelaeno* would allow an Opinion to be published combined with that on *Acanthoteuthis*. Before sending the application on *Kelaeno* for revoting the Commission Secretariat consulted Prof Donovan. He commented (in litt., March 1996): 'I am not worried by the loss of *Kelaeno* Münster, 1842, although I had proposed its conservation, provided that *Acanthoteuthis* is upheld and that the name *Kelaeno* is rejected in all possible meanings'.

The original proposals relating to *Kelaeno* (proposals (1), 2(b), (3)(b), (4)(a) and (4)(b) on BZN **51**: 221–222) were set out and sent for a second vote on 16 September 1996. Additional proposals to place KELAENIDAE Naef, 1821 on the Official List and *Celaeno* Wagner, 1860 on the Official Index were included on the voting paper. Proposals (4)(c) and (d) in para. 12 on BZN **51**: 222 (to place the incorrect subsequent spellings *Celaeno* Owen, 1844 and *Kalaeno* Krimholz, 1958 on the Official Index) were omitted; both are unavailable names.

Decisions of the Commission

On 1 December 1995 the members of the Commission were invited to vote on the proposals published in BZN **51**: 221–222 (Vote 1), and on 16 September 1996 they were invited to revote on those relating to *Kelaeno* (Vote 2). At the close of the voting periods on 1 March 1996 and on 16 December 1996 respectively the votes were as follows:

Vote 1. Affirmative votes — 18: Bayer, Bock, Cocks, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen (part), Macpherson, Mahnert, Martins de Souza, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Trjapitzin

Negative votes — 8: Bouchet, Cogger, Corliss, Dupuis, Hahn, Heppell, Minelli and Štys.

Lehtinen supported placing *Acanthoteuthis* Wagner in Münster, 1839 on the Official List but voted against the conservation of *Kelaeno* Münster, 1842.

Vote 2. Affirmative votes — 10: Bock, Cocks, Kabata, Macpherson, Mawatari, Nye, Papp, Schuster, Song, Štys

Negative votes — 13: Bouchet, Brothers, Cogger, Eschmeyer, Heppell, Kerzhner, Kraus, Lehtinen, Mahnert, Martins de Souza, Minelli, Patterson and Savage.

Nielsen abstained.

No vote was received from Dupuis.

Ride was on leave of absence.

Martins de Souza and Patterson commented that they were satisfied with Engeser's argument and agreed with his solution (adoption of the replacement name *Muensterella* Schevill, 1950) to the problem of the homonymous name *Kelaeno* Münster, 1842.

The required majority for the conservation of *Kelaeno* Münster, 1842 (and thus KELAENIDAE Naef, 1921) was not reached and the names *Muensterella* Schevill, 1950 and MUENSTERELLIDAE Roger, 1952 (1921) are placed on Official Lists.

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

Acanthoteuthis Wagner, 1839, *in* Münster, G. Graf zu (Ed.), *Beiträge zur Petrefacten-Kunde*, part 1, p. 94.

arquata, *Kelaeno*, Münster, 1842, *in* Munster, G. Graf zu (Ed.), *Beiträge zur Petrefacten-Kunde*, part 5, p. 96.

CELAENIDAE Naef, 1922, *Die fossilen Tintenfische*, p. 150.

Celaeno Wagner, 1860, *Abhandlungen der Mathemat.-Physikalischen Classe der königlich bayerischen Akademie der Wissenschaften*, **8**(3): 779.

KELAENIDAE Naef, 1921, *Mitteilungen aus der Zoologischen Station zu Neapel*, **22**: 535.

Kelaeno d'Orbigny, 1841, *Bulletin de la Société Géologique de France*, **12**: 354.

Kelaeno Münster, 1839, *in* Münster, G. Graf zu (Ed.), *Beiträge zur Petrefacten-Kunde*, part 1, p. 94.

Kelaeno Münster, 1842, *Neues Jahrbuch für Mineralogie, Geognosie, Geologie und Petrefakten-Kunde*, **1842**: p. 46.

Muensterella Schevill, 1950, *Journal of Paleontology*, **24**: 117.

MUENSTERELLIDAE Roger, 1952, *in* Piveteau, J. (Ed.), *Traité de Paléontologie*, vol. 2, p. 742.

speciosa, *Acanthoteuthis*, Münster, 1839, *in* Münster, G. Graf zu (Ed.), *Beiträge zur Petrefacten-Kunde*, part 1, p. 94.

The following is the reference for the designation of *Acanthoteuthis speciosa* Münster, 1839 as the type species of the nominal genus *Acanthoteuthis* Wagner in Münster, 1839 and, under Article 67h of the Code, for the fixation of *Kelaeno arquata* Münster, 1842 as the type species of *Muensterella* Schevill, 1950:

Bülow-Trummer, E. von. 1920. *Fossilium Catalogus, 1 (Animalia)*, part 11, pp. 268, 266 (respectively).

OPINION 1861

Octopus vulgaris Cuvier, [1797] and *Loligo vulgaris* Lamarck, 1798 (Mollusca, Cephalopoda): specific names conserved

Keywords. Nomenclature; taxonomy; Cephalopoda; common octopus; common squid; *Octopus vulgaris*; *Loligo vulgaris*.

Ruling

(1) Under the plenary powers the following specific names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
   (a) *octopodia* Linnaeus, 1758, as published in the binomen *Sepia octopodia*;
   (b) *octopus* Gmelin, [1791], as published in the binomen *Sepia octopus*;
   (c) *loligo* Linnaeus, 1758, as published in the binomen *Sepia loligo*.

(2) The name *Loligo* Lamarck, 1798 (gender: masculine), type species *Loligo vulgaris* Lamarck, 1798 by subsequent designation by Children (1823), is hereby placed on the Official List of Generic Names in Zoology.

(3) The entry for *Octopus* Cuvier, [1797] on the Official List of Generic Names in Zoology is hereby emended to record that its type species by absolute tautonymy is *Sepia octopus* Gmelin, [1791] (suppressed senior objective synonym of *Octopus vulgaris* Cuvier, [1797]).

(4) The name *vulgaris* Lamarck, 1798, as published in the binomen *Loligo vulgaris* (specific name of the type species of *Loligo* Lamarck, 1798), is hereby placed on the Official List of Specific Names in Zoology.

(5) The entry for *Octopus vulgare* (recte *vulgaris*) Cuvier, [1797] on the Official List of Specific Names in Zoology is hereby emended to record that *vulgaris* Cuvier, [1797] is the valid junior objective synonym of *Sepia octopus* Gmelin, [1791], the type species of *Octopus* Cuvier, [1797].

(6) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:
   (a) *octopodia* Linnaeus, 1758, as published in the binomen *Sepia octopodia* and as suppressed in (1)(a) above;
   (b) *octopus* Gmelin, [1791], as published in the binomen *Sepia octopus* and as suppressed in (1)(b) above;
   (c) *loligo* Linnaeus, 1758, as published in the binomen *Sepia loligo* and as suppressed in (1)(c) above.

History of Case 2922

An application for the conservation of the specific names of *Octopus vulgaris* Cuvier, [1797] and *Loligo vulgaris* Lamarck, 1798 was received from Dr Angel Guerra (*Instituto de Investigaciones Marinas (CSIC), Vigo (Pontevedra), Spain*) and Dr Miguel A. Alonso-Zarazaga (*Museo Nacional de Ciencias Naturales (CSIC), Madrid, Spain*) on 29 December 1993. After correspondence the case was published in BZN **52**: 24–26 (March 1995). Notice of the case was sent to appropriate journals.

Comments in support of the application from Prof D.T. Donovan (*University College London, London, U.K.*), from Drs Michael Vecchione & Michael J. Sweeney

(*National Museum of Natural History, Smithsonian Institution, Washington, D.C., U.S.A.*), and from Dr J.B. Messenger (*The University of Sheffield, Sheffield, U.K.*), were published in BZN **52**: 333–335 (December 1995).

A further comment in support from Dr Marion Nixon (*Birkbeck College, London, U.K.*) was published in BZN **53**: 45 (March 1996).

In their comment (BZN **52**: 334) Vecchione & Sweeney considered that Huddesford (in Lister, 1770), and not Lamarck (1798), was the first author to make available the generic name *Loligo*.

The generic name *Octopus* and the name of its type species *Octopus vulgare* (recte *vulgaris*), both of Cuvier [1797], were placed on Official Lists in Opinion 233 (April 1954). However, the senior specific names of *Sepia octopodia* Linnaeus, 1758 and *S. octopus* Gmelin, [1791] were not then considered.

Decision of the Commission

On 16 September 1996 the members of the Commission were invited to vote on the proposals published in BZN **52**: 25. At the close of the voting period on 16 December 1996 the votes were as follows:

Affirmative votes — 24: Bock, Bouchet, Brothers, Cocks, Cogger, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Nye, Papp, Patterson, Savage, Schuster, Song, Štys

Negative votes — none.

Dupuis abstained.

Ride was on leave of absence.

Abstaining, Dupuis commented: 'I refuse to vote on this case because in my personal view the time between the last comment and the distribution of voting papers was too short. The last comment was less than one year old'. [*Editorial note*. The comment was one of support. An explanation of procedure followed in sending cases for voting is given on pp. 53–54]. Voting for, Bouchet commented: 'This is an exemplary case where zoological names are used in non-taxonomical and even non-zoological literature. I am happy to deviate from the principle of priority in such well-founded cases'.

Heppell commented: 'The citation in the application of the method of type fixation for *Octopus* is still incorrect (cf. para. 2). Cuvier ([1797]) cited *Sepia octopus* Gmelin and that nominal species is the type by absolute tautonymy (Article 68e of the Code), regardless of whether or not that name is ruled to be invalid. Its currently valid name is *Octopus vulgaris*. [The method of type fixation is correct in the ruling].

While I agree with the purpose of this application, I would regard *Sepia octopodia* and *S. loligo* of Linnaeus (1758) as nomina dubia rather than senior synonyms of *Octopus vulgaris* and *Loligo vulgaris* respectively. *Sepia octopodia* was almost certainly an amalgam of all octopods known in the 18th century, including what would subsequently be named *Eledone cirrhosa*, *E. moschata*, and *Octopus rugosus* as well as *O. vulgaris*. Some later authors (for example, Pennant, 1777, *British Zoology*, Ed. 4, vol. 4) used the name with reference to *Eledone*. It is not true that the name *Octopus octopodia* has been unused for over a century (para. 3; cf. Winkworth, 1928, 'The hectocotylus of *Octopus octopodia* (L.)'. *Proceedings of the Malacological Society of London*, **18**: 49–50). *Sepia loligo* was similarly an undifferentiated mixture

of squids. Linnaeus's observation '... cauda extra aquam exsilit' certainly fits the behaviour of ommastrephid squid such as *Todarodes sagittatus* better than any species of *Loligo*. Nevertheless I do agree that both names should now be suppressed under the plenary powers.

I disagree totally with Vecchione & Sweeney's (BZN **52**: 334) ill-advised proposal to credit Huddesford (1770) with the authorship of the name *Loligo*. I suspect that 'Loligo' there is a Latin vernacular. This spelling (instead of the classical 'lolligo') was used by 16th century authors such as Rondeletius. The Huddesford indexes are certainly known to malacologists and rightly, I believe, ignored as a source of names. Sherborn (*Index Animalium 1758–1800*) included Huddesford's edition of Lister's work but did not accept 'Loligo' before Lamarck's (1798) use of the name'.

Kerzhner commented: 'I strongly disapprove of accepting 'Loligo' as an available name from Huddesford (in Lister, 1770). The heading 'Loligo a Sleeve' on pl. 9 of Lister's anatomical figures has 'Loligo' and 'a Sleeve' printed in different type faces and are the names in Latin and in English for the animal, as is clear from the text on pl. 10: 'Loliginis anatome anglice a Sleeve dictae' (anatomy of Loligo named Sleeve in English). However, a Latin name in a Latin text is not necessarily a scientific name; nor is a capital letter for 'Loligo' evidence for its use as a generic name because a capital letter was also used for the English word 'Sleeve'. Apart from 'Loligo', there are some other Latin names ('Pomatia' and 'Purpura', for example) written in a similar format which are universally attributed as scientific generic names to later authors. Hence, the erroneous acceptance of Lister (1770) as a source for *Loligo* would have implications for other names also'.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Loligo Lamarck, 1798, *Bulletin des Sciences, par la Société Philomatique de Paris*, **17**: 130.

loligo, Sepia, Linnaeus, 1758, *Systema Naturae...*, Ed. 10, vol, 1, p. 659.

octopodia, Sepia, Linnaeus, 1758, *Systema Naturae...*, Ed. 10, vol. 1, p. 658.

octopus, Sepia, Gmelin, [1791], *Caroli a Linné Systema Naturae*, Ed. 13, vol. 1, part 6 (Vermes), p. 3149.

vulgaris, Loligo, Lamarck, 1798, *Bulletin des Sciences, par la Société Philomatique de Paris*, **17**: 130.

The following is the reference for the designation of *Loligo vulgaris* Lamarck, 1798 as the type species of the nominal genus *Loligo* Lamarck, 1798:

Children, J.G. 1823. *Lamarck's genera of shells*, p. 16.

OPINION 1862

Aspidiphorus Ziegler in Dejean, 1821 (Insecta, Coleoptera): conserved as the correct original spelling, and SPHINDIDAE Jacquelin du Val, [1861]: given precedence over ASPIDIPHORIDAE Kiesenwetter, 1877 (1859)

Keywords. Nomenclature; taxonomy; Coleoptera; SPHINDIDAE; ASPIDIPHORIDAE; *Sphindus*; *Aspidiphorus*.

Ruling

(1) Under the plenary powers it is hereby ruled that:
  (a) the correct original spelling of the generic name *Arpidiphorus* Ziegler in Dejean, 1821 is *Aspidiphorus*;
  (b) the family-group name SPHINDIDAE Jacquelin du Val, [1861] and other family-group names based on *Sphindus* Megerle in Dejean, 1821 are given precedence over ASPIDIPHORIDAE Kiesenwetter, 1877 (1859) and other family-group names based on *Aspidiphorus* Ziegler in Dejean, 1821.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:
  (a) *Aspidiphorus* Ziegler in Dejean, 1821 (gender: masculine), type species by monotypy *Nitidula orbiculata* Gyllenhal, 1808;
  (b) *Sphindus* Megerle in Dejean, 1821 (gender: masculine), type species by monotypy *Nitidula dubia* Gyllenhal, 1808.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  (a) *orbiculata* Gyllenhal, 1808, as published in the binomen *Nitidula orbiculata* (specific name of the type species of *Aspidiphorus* Ziegler in Dejean, 1821);
  (b) *dubia* Gyllenhal, 1808, as published in the binomen *Nitidula dubia* Gyllenhal, 1808 (specific name of the type species of *Sphindus* Megerle in Dejean, 1821).

(4) The following names are hereby placed on the Official List of Family-Group Names In Zoology:
  (a) SPHINDIDAE Jacquelin du Val, [1861] (type genus *Sphindus* Megerle in Dejean, 1821) with the endorsement that it and other family-group names based on *Sphindus* are to be given precedence over ASPIDIPHORIDAE Kiesenwetter, 1877 (1859) (type genus *Aspidiphorus* Ziegler in Dejean, 1821) and other family-group names based on *Aspidiphorus* whenever their type genera are placed in the same family-group taxon;
  (b) ASPIDIPHORIDAE Kiesenwetter, 1877 (1859) (type genus *Aspidiphorus* Ziegler in Dejean, 1821) with the endorsement that it and other family-group names based on *Aspidiphorus* are not to be given priority over SPHINDIDAE Jacquelin du Val, [1861] (type genus *Sphindus* Megerle in Dejean, 1821) whenever their type genera are placed in the same family-group taxon.

(5) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) *Arpidiphorus* Ziegler in Dejean, 1821 (ruled in (1)(a) above to be an incorrect original spelling of *Aspidiphorus* Ziegler in Dejean, 1821);
(b) *Aspidophorus* Agassiz, 1846 (an unjustified emendation of *Aspidiphorus* Ziegler in Dejean, 1821 and a junior homonym of *Aspidophorus* Lacepède, [1801]);
(c) *Box* Gistel, 1848 (an unnecessary replacement name for *Aspidiphorus* Ziegler in Dejean, 1821);
(d) *Coniporus* Thomson, 1859 (a junior objective synonym of *Aspidiphorus* Ziegler in Dejean, 1821).

History of Case 2918

An application to conserve *Aspidiphorus* Ziegler in Dejean, 1821 as the correct original spelling of the generic name first published as *Arpidiphorus*, and to place the family-group name ASPIDIPHORIDAE Kiesenwetter, 1877 (1859) on the Official List, was received from Dr Joseph V. McHugh (*University of Georgia, Athens, Georgia, U.S.A.*) on 26 November 1993. After correspondence the case was published in BZN **52**: 44–47 (March 1995). Notice of the case was sent to appropriate journals.

A comment from Prof Alfred J. Newton Jr. & Dr Margaret K. Thayer (*Field Museum of Natural History, Chicago, Illinois, U.S.A.*), published in BZN **52**: 264–266 (September 1995), supported the conservation of the name *Aspidiphorus* Ziegler in Dejean, 1821 as the correct spelling but opposed placing ASPIDIPHORIDAE Kiesenwetter, 1877 (1859) on the Official List as the valid name for a family-group taxon that includes both *Aspidiphorus* and *Sphindus* Megerle in Dejean, 1821. They proposed (BZN **52**: 266) that the near-universal usage of the family-group name SPHINDIDAE Jacquelin du Val, [1861] be conserved for the taxon by Commission action by giving it precedence over ASPIDIPHORIDAE; the latter name was not proposed until Kiesenwetter (1877) but it takes the date 1859 from Thomson's tribal name based on *Coniporus* Thomson, 1859 under Article 40b of the Code (para. 8 of the application).

It was noted on the voting paper that approval by the Commission of Newton & Thayer's proposal would render SPHINDIDAE the valid name for the family when *Sphindus* and *Aspidiphorus* were considered to be confamilial; names based on *Aspidiphorus* would remain available for use for family-group taxa not containing *Sphindus*. Both names SPHINDIDAE and ASPIDIPHORIDAE (together with the relevant type genera and type species) would be placed on the Official List with endorsements to record their relative precedence.

Both sets of authors, McHugh and Newton & Thayer, favoured the conservation of the spelling *Aspidiphorus*. This was given on the voting papers as Proposal A. Placement of the family-group name ASPIDIPHORIDAE, but not SPHINDIDAE, on the Official List (Proposal B), and the proposed precedence of SPHINDIDAE over ASPIDIPHORIDAE by use of the plenary powers (Proposal C), were offered as alternatives for voting. Proposal B was that of McHugh (BZN **52**: 46, para. 10(4)), Proposal C that of Newton & Thayer (BZN **52**: 266).

It was noted on the voting paper that the reference cited in para. 9 of the application as 'Pakaluk, Ślipiński & Lawrence, in press' was published as:

Pakaluk, J., Ślipiński, S.A. & Lawrence, J.F. 1994. Current classification and family-group names in Cucujoidea (Coleoptera). *Genus*, **5**: 223–268.

Decision of the Commission

On 16 September 1996 the members of the Commission were invited to vote. At the close of the voting period on 16 December 1996 the votes were as follows:

Proposal A. Affirmative votes — 23: Bock, Bouchet, Brothers, Cocks, Cogger, Eschmeyer, Heppell, Kabata, Kerzhner, Lehtinen, Kraus, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nye, Papp, Patterson, Savage, Schuster, Song, Štys

Negative votes — none.

Proposal B — 6: Bock, Bouchet, Kabata, Lehtinen, Mawatari and Schuster.

Proposal C — 18: Brothers, Cocks, Cogger, Eschmeyer, Heppell, Kerzhner, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Papp, Patterson, Savage, Song and Štys.

Ride was on leave of absence.

Dupuis commented: 'En Opinion 1855, Septembre 1996, au lieu de conserver le nom du poisson *Aspidophorus* Lacepède, [1801] nous avons pris une première decision ridicule (AGONUMIDAE Kirby, 1837) et risquons aujourd'hui d'en prendre une deuxième (emploi conditionnel le nom coleopteran d'ASPIDIPHORIDAE Kiesenwetter, 1877). En attendant, je refuse tout vote sur ce case'.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Arpidiphorus Ziegler in Dejean, 1821, *Catalogue de la collection de coléoptères de M. le Baron Dejean*, p. 47 (an incorrect original spelling of *Aspidiphorus*).

ASPIDIPHORIDAE Kiesenwetter, 1877, *Naturgeschichte der Insecten Deutschlands* (W.F. Erichson), vol. 1 (Coleoptera), part 5, Hälfte 1, p. 198.

Aspidiphorus Ziegler in Dejean, 1821, *Catalogue de la collection de coléoptères de M. le Baron Dejean*, p. 47 (incorrectly spelt as *Arpidiphorus*).

Aspidophorus Agassiz, 1846, *Nomenclatoris Zoologici Index Universalis* ..., p. 36.

Box Gistel, 1848, *Naturgeschichte des Thierreichs für höhere Schulen*, p. viii.

Coniporus Thomson, 1859, *Skandinaviens Coleoptera, synoptiskt bearbetade*, vol. 1, p. 90.

dubia, Nitidula, Gyllenhal, 1808, *Insecta Svecica, Descripta a Leonardo Gyllenhal, Classis I. Coleoptera sive Eleuterata*, vol. 1, p. 243.

orbiculata, Nitidula, Gyllenhal, 1808, *Insecta Svecica, Descripta a Leonardo Gyllenhal, Classis I. Coleoptera sive Eleuterata*, vol. 1, p. 242.

SPHINDIDAE Jacquelin du Val, [1861], *Manuel entomologique. Genera des coléoptères d'Europe, comprenant leur classification en familles naturelles, la description de tous les genres* ..., vol. 3, p. 224.

Sphindus Megerle in Dejean, 1821, *Catalogue de la collection de coléoptères de M. le Baron Dejean*, p. 102.

OPINION 1863

Sphaerocera Latreille, 1804 and *Borophaga* Enderlein, 1924 (Insecta, Diptera): conserved; *Musca subsultans* Linnaeus, 1767: specific name placed on the Official List

Keywords. Nomenclature; taxonomy; Diptera; SPHAEROCERIDAE; PHORIDAE; *Sphaeocera*; *Borophaga*; *Musca subsultans*.

Ruling

(1) Under the plenary powers the name *Borborus* Meigen, 1803 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:
   (a) *Sphaerocera* Latreille, 1804 (gender: feminine), type species by subsequent monotypy by Latreille (1805) *Sphaerocera curvipes* Latreille, 1805;
   (b) *Borophaga* Enderlein, 1924 (gender: feminine), type species by original designation *Phora flavimana* Meigen, 1830 (a junior subjective synonym of *Phora femorata* Meigen, 1830 by the first reviser action of Zetterstedt (1848)).

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:
   (a) *curvipes* Latreille, 1805, as published in the binomen *Sphaerocera curvipes* (specific name of the type species of *Sphaerocera* Latreille, 1804);
   (b) *femorata* Meigen, 1830, as published in the binomen *Phora femorata* (senior subjective synonym by the first reviser action of Zetterstedt (1848) of the specific name of *Phora flavimana* Meigen, 1830, the type species of *Borophaga* Enderlein, 1924);
   (c) *subsultans* Linnaeus, 1767, as published in the binomen *Musca subsultans*.

(5) The name *Borborus* Meigen, 1803, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2907

An application for the conservation of the generic names *Sphaerocera* Latreille, 1804 and *Borophaga* Enderlein, 1924, and of the specific names of *Sphaerocera curvipes* Latreille, 1805 and *Phora flavimana* Meigen, 1830, was received from Dr Brian V. Brown (*Natural History Museum of Los Angeles County, Los Angeles, California, U.S.A.*) and Dr Curtis W. Sabrosky (*U.S. Department of Agriculture, c/o Smithsonian Institution, Washington, D.C., U.S.A.*) on 18 October 1993. After correspondence the case was published in BZN **51**: 312–315 (December 1994). Notice of the case was sent to appropriate journals.

A comment from Dr R.H.L. Disney (*Cambridge University, Cambridge, U.K.*), published in BZN **52**: 181–182 (June 1995), pointed out that the valid name for the type species of *Borophaga* Enderlein, 1924 (family PHORIDAE) is *B. femorata* (Meigen, 1830), a senior subjective synonym of *B. flavimana* (Meigen, 1830) by the first reviser

action of Zetterstedt (1848). It was noted on the voting paper that the specific name of *B. femorata*, rather than that of *B. flavimana*, would be placed on the Official List (Recommendation 67B of the Code) (cf. paras. 7(2)(b) and 7(3)(b) of the application); the nominal species *Phora flavimana* remains the type species of *Borophaga*.

Dr Disney also pointed out that *Musca subsultans* Linnaeus, 1767, which through misidentification had been treated as the valid name of the type species of *Borborus* Meigen, 1803 (family SPHAEROCERIDAE), is actually the species called *Borophaga okellyi* by Schmitz (1937) (family PHORIDAE). In the light of the comments there was no need to take action over the name *flavimana*.

Dr Disney supported the conservation of the generic name *Sphaerocera* Latreille, 1804 by suppressing the unused name *Borborus* Meigen, 1803 (para. 7(1)(a) of the application), but opposed the suppression of the specific name of *Musca subsultans*. He proposed (BZN **52**: 182, para. 3) that the latter be retained for use (as *Borophaga subsultans*) in the PHORIDAE and be placed on the Official List (cf. para. 7(1)(b)).

A reply by Dr Brian Brown, one of the authors of the application, was published in BZN **52**: 182–183 (June 1995); he defended usage of the name *Borophaga okellyi* and the proposed suppression of the name *subsultans*. A further response by Disney was published in BZN **52**: 336–337 (December 1995); in this he reiterated that the name *Borophaga subsultans* was valid and should be used.

Both alternatives, suppression and placement on the Official Index of the specific name of *Musca subsultans* Linnaeus, 1767 (included in Proposal A), and its retention and placement on the Official List (Proposal B), were offered for voting. Proposal A was that of Brown & Sabrosky (BZN **51**: 313–314); Proposal B was that of Disney (BZN **52**: 182, para. 3). Both Proposals A and B included the suppression of *Borborus* Meigen, 1803 except for the purposes of homonymy, and amendments to paras. 7(2)(b) and 7(3)(b) (recognition of *Phora femorata* Meigen, 1830 as a senior synonym of *P. flavimana* and placement of *femorata* on the Official List).

Decision of the Commission

On 16 September 1996 the members of the Commission were invited to vote. At the close of the voting period on 16 December 1996 the votes were as follows:

Proposal A 10: Bock, Cocks, Dupuis, Heppell, Kabata, Kraus, Mawatari, Papp, Savage and Song.

Proposal B 15: Bouchet, Brothers, Cogger, Eschmeyer, Kerzhner, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Patterson, Schuster and Štys.

Ride was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Borborus Meigen, 1803, *Magazin für Insektenkunde (Illiger)*, **2**: 276.

Borophaga Enderlein, 1924, *Entmologische Mitteilungen*, **8**: 277.

curvipes, *Sphaerocera*, Latreille, 1805, *Histoire naturelle, générale et particulière des crustacés et des insectes*, vol. 14, p. 394.

femorata, *Phora*, Meigen, 1830, *Systematische Beschreibung der bekannten Europäischen Zweiflügeligen*, vol. 6, p. 213.

Sphaerocera Latreille, 1804, *Nouveau dictionnaire d'histoire naturelle*, vol. 24, p. 197.
subsultans, *Musca*, Linnaeus, 1767, *Systema Naturae*, Ed. 12, vol. 1, part 2, p. 993.

The following is the reference for the fixation of *Sphaerocera curvipes* Latreille, 1805 as the type species of the nominal genus *Sphaerocera* Latreille, 1804:
Latreille, P.A. 1805. *Histoire naturelle, générale et particulière des crustacés et des insectes*, vol. 14, p. 394.

The following is the reference for the first reviser selection of the precedence of *Phora femorata* over *P. flavimana*, both of Meigen (1803):
Zetterstedt, J.W. 1848. *Diptera Scandinaviae disposita et descripta*, p. 2886.

OPINION 1864

Chaetodacus latifrons Hendel, 1915 (currently *Bactrocera latifrons*; Insecta, Diptera): given precedence over *Dacus parvulus* Hendel, 1912

Keywords. Nomenclature; taxonomy; Diptera; fruit flies; *Bactrocera latifrons*; *Dacus parvulus*; south-east Asia; Hawaiian islands.

Ruling

(1) Under the plenary powers the specific name *latifrons* Hendel, 1915, as published in the binomen *Chaetodacus latifrons*, is hereby given precedence over the specific name *parvulus* Hendel, 1912, as published in the binomen *Dacus parvulus*, whenever the two names are considered to be synonyms.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *latifrons* Hendel, 1915, as published in the binomen *Chaetodacus latifrons* and as defined by the male lectotype from Tainan (Taiwan), now in the Natural History Museum, London, and denoted by a standard purple-edged lectotype label, designated by White & Liquido (1995), with the endorsement that it is to be given precedence over *parvulus* Hendel, 1912, as published in the binomen *Dacus parvulus*, whenever the two names are considered to be synonyms;

(b) *parvulus* Hendel, 1912, as published in the binomen *Dacus parvulus*, with the endorsement that it is not to be given priority over *latifrons* Hendel, 1915, as published in the binomen *Chaetodacus latifrons*, whenever the two names are considered to be synonyms.

History of Case 2967

An application for the conservation of the specific name of *Chaetodacus latifrons* Hendel, 1915 by giving it precedence over that of *Dacus parvulus* Hendel, 1912 was received from Dr I.M. White (*International Institute of Entomology, c/o The Natural History Museum, London, U.K.*) and Dr N.J. Liquido (*United States Department of Agriculture, Agricultural Research Service, Hilo, Hawaii, U.S.A.*) on 15 February 1995. After correspondence the case was published in BZN **52**: 250–252 (September 1995). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 16 September 1996 the members of the Commission were invited to vote on the proposals published in BZN **52**: 252. At the close of the voting period on 16 December 1996 the votes were as follows:

Affirmative votes — 23: Bock, Brothers, Cocks, Cogger, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Nye, Papp, Patterson, Savage, Schuster, Song, Štys

Negative votes — 1: Dupuis.

Bouchet abstained.

Ride was on leave of absence.

Abstaining, Bouchet commented: 'The case for maintaining the current usage of *Bactrocera latifrons* is well founded and I approve the intention of the application. However, I disapprove of the procedure of giving precedence to a junior name. Retention of the name *parvulus* serves no practical purpose and I would have preferred that it be suppressed. If in future 'better knowledge of the genetics of *Solanum* fruit flies' (para. 6 of the application) leads to the recognition of additional species beside *latifrons*, a new nominal species erected in the context of that knowledge might be preferable'. Voting against, Dupuis commented that in his view the case related to a taxonomic, rather than a nomenclatural, problem.

Original references

The following are the original references to the names placed on an Official List by the ruling given in the present Opinion:

latifrons, *Chaetodacus*, Hendel, 1915, *Annales Historico-Naturales Musei Nationalis Hungarici*, **13**: 425.

parvulus, *Dacus*, Hendel, 1912, *Supplementa Entomologica*, **1**: 21.

The following is the reference for the designation of the lectotype of *Chaetodacus latifrons* Hendel, 1915:

White, I.M. & Liquido, N.J. 1995. BZN **52**: 251.

OPINION 1865

Eudistoma Caullery, 1909 (Tunicata): given precedence over *Paessleria* Michaelsen, 1907

Keywords. Nomenclature; taxonomy; Tunicata; Ascidiacea; *Eudistoma*; *Paessleria*.

Ruling

(1) Under the plenary powers the generic name *Eudistoma* Caullery, 1909 is hereby given precedence over *Paessleria* Michaelsen, 1907 whenever the two names are considered to be synonyms.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Eudistoma* Caullery, 1909 (gender: neuter), type species by subsequent designation by Michaelsen (1930) *Distoma rubrum* Savigny, 1816, with the endorsement that it is to be given precedence over *Paessleria* Michaelsen, 1907 whenever the two names are considered to be synonyms;

(b) *Paessleria* Michaelsen, 1907 (gender: feminine), type species by monotypy *Paessleria magalhaensis* Michaelsen, 1907, with the endorsement that it is not to be given priority over *Eudistoma* Caullery, 1909 whenever the two names are considered to be synonyms.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *rubrum* Savigny, 1816, as published in the binomen *Distoma rubrum* (specific name of the type species of *Eudistoma* Caullery, 1909);

(b) *magalhaensis* Michaelsen, 1907, as published in the binomen *Paessleria magalhaensis* (specific name of the type species of *Paessleria* Michaelsen, 1907).

History of Case 2933

An application to conserve the generic name *Eudistoma* Caullery, 1909 by giving it precedence over *Paessleria* Michaelsen, 1907 was received from Dr Patricia Kott (*Queensland Museum, South Brisbane, Queensland, Australia*) on 30 March 1994. After correspondence the case was published in BZN **52**: 254–256 (September 1995). Notice of the case was sent to appropriate journals.

Gaertner (in Pallas, 1774, p. 40) introduced the new genus *Distomus* (now included in the STYELIDAE, Stolidobranchia) with the single included species *D. variolosus* Gaertner, 1774, which is the type by monotypy. Savigny (1816) referred to Gaertner's genus and species, added the new species *rubrum*, and at the same time (p. 176) used '*Distoma*' without explaining the change of spelling. As an incorrect subsequent spelling *Distoma* is not an available name (Article 33c of the Code; cf. para. 1 of the application). The change in spelling from *Distomus* to *Distoma* was followed by Caullery (1909) and Michaelsen (1930). This does not affect the ruling on *Eudistoma* Caullery, 1909.

Gaertner, J. 1774. Zoophyta quaedam minuta. Pp. 34–41 *in* Pallas, P.S., *Spicilegia Zoologica*, part 10.

Decision of the Commission

On 16 September 1996 the members of the Commission were invited to vote on the proposals published in BZN **52**: 255. At the close of the voting period on 16 December 1996 the votes were as follows:

Affirmative votes — 21: Bock, Brothers, Cocks, Cogger, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Nye, Papp, Patterson, Savage, Schuster, Song

Negative votes — 3: Dupuis, Lehtinen and Štys.

Bouchet abstained.

Ride was on leave of absence.

Abstaining, Bouchet commented: 'The case for maintaining the current usage of *Eudistoma* is well founded and I approve the intention of the application. However, I disapprove of the procedure of giving precedence to a junior name. Retention of the name *Paessleria* serves no practical purpose and I would have preferred that it be suppressed'. Voting against, Dupuis commented that in his view the case related to a taxonomic, rather than a nomenclatural, problem. Lehtinen commented: 'The name *Eudistoma* was invalidly proposed and lack of use of *Paessleria* seems to be due mainly to little work in the original area (the Straits of Magellan). There are no reasons for giving precedence to the junior name'.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Eudistoma Caullery, 1909, *Bulletin Scientifique de la France et de la Belgique*, **42**: 44.

magalhaensis, *Paessleria*, Michaelsen, 1907, *Ergebnisse der Hamburger Magalhaensischen Sammelreise*, **8**(5): 69.

Paessleria Michaelsen, 1907, *Ergebnisse der Hamburger Magalhaensischen Sammelreise*, **8**(5): 68.

rubrum, *Distoma* (recte *Distomus*), Savigny, 1816, *Mémoires sur les animaux sans vertèbres*, part 2, p. 177.

The following is the reference for the designation of '*Distoma*' *rubrum* Savigny, 1816 as the type species of the nominal genus *Eudistoma* Caullery, 1909:

Michaelsen, W. 1930. *Die Fauna Südwest-Australiens*, **5**(7): 489.

OPINION 1866

Hydromantes Gistel, 1848 (Amphibia, Caudata): *Spelerpes platycephalus* Camp, 1916 designated as the type species

Keywords. Nomenclature; taxonomy; Amphibia; PLETHODONTIDAE; salamanders; *Hydromantes*; *Hydromantes genei*; *Hydromantes platycephalus*; Italy; France; Sardinia; California.

Ruling

(1) Under the plenary powers:
  (a) the name *Geotriton* Bonaparte, [1832] is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
  (b) all previous fixations of type species for the nominal genus *Hydromantes* Gistel, 1848 are hereby set aside and *Spelerpes platycephalus* Camp, 1916 is designated as the type species.

(2) The name *Hydromantes* Gistel, 1848 (gender: masculine), type species by designation under the plenary powers in (1)(b) above *Spelerpes platycephalus* Camp, 1916, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *platycephalus* Camp, 1916, as published in the binomen *Spelerpes platycephalus* (specific name of the type species of *Hydromantes* Gistel, 1848), is hereby placed on the Official List of Specific Names in Zoology.

(4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
  (a) *Geotriton* Bonaparte, [1832], as suppressed in (1)(a) above;
  (b) *Hydromantoides* Lanza & Vanni, 1981 (a junior objective synonym of *Hydromantes* Gistel, 1848).

History of Case 2868

An application to conserve the usage of the name *Hydromantes* Gistel, 1848 by the designation of *Salamandra genei* Temminck & Schlegel, 1838 as the type species of the genus was received from Prof Hobart M. Smith (*University of Colorado, Boulder, Colorado, U.S.A.*) and Dr David B. Wake (*Museum of Vertebrate Zoology, University of California, Berkeley, California, U.S.A.*) on 16 November 1992. After correspondence the case was published in BZN **50**: 219–223 (September 1993). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that Bonaparte ([1832]) established *Geotriton* based on the nominal species *Salamandra exigua* Laurenti, 1768. Dunn (1923) and Dubois (1984) accepted *S. exigua* as a salamandrid, and Duellman & Trueb (1986) treated *Geotriton* as a junior synonym of *Triturus* Rafinesque, 1815 (= *Triton* Laurenti, 1768) in the SALAMANDRIDAE. *Geotriton* was used as a valid name until 1923 and included species now placed in the PLETHODONTIDAE; Bonaparte ([1837]) included '*Salamandra fusca* Laurenti, 1768' (a misidentification of *Hydromantes italicus* Dunn, 1923) and Tschudi ([1838]) placed *Salamandra genei* Temminck & Schlegel, 1838 in the genus. Dubois (1984; see also BZN **52**: 185, para. 4) considered that Bonaparte's ([1832]) use of '*Salamandra exigua*' as the basis of *Geotriton* was a misidentification of *Hydromantes italicus*, like his ([1837]) use of '*S. fusca*'.

Dunn (1923, 1926) resurrected *Hydromantes* Gistel, 1848 for species placed in the PLETHODONTIDAE. Although this was incorrect, since *Hydromantes* was a replacement name for *Geotriton*, *Hydromantes* has been very widely used during the past 70 years and the application sought its conservation by the designation of a plethodontid type species.

Dubois (1984) adopted *Hydromantoides* Lanzi & Vanni, 1981 for the American group of plethodontid species, and placed the European species in the new subgenus *Speleomantes* (type species *Hydromantes italicus*). This action addressed the nomenclatural problem (the fact that *Hydromantes* was a replacement for *Geotriton*) but did not preserve the long use of *Hydromantes* in the PLETHODONTIDAE. It was with the latter aim that Prof Smith and Dr Wake sought the designation of the plethodontid *Salamandra genei* as the type species of *Hydromantes*.

Comments in support were published in BZN **51**: 149–153 (June 1994): Dr Mark R. Jennings (*Fish and Wildlife Service, National Ecology Research Center, Davis, California, U.S.A.*), Dr Harold A. Dundee (*Tulane University, New Orleans, Louisiana, U.S.A.*), Prof Georgio Mancino (*Università degli Studi di Pisa, Ghezzano, Italy*), Prof Benedetto Lanza (*Università degli Studi di Firenze, Firenze, Italy*), Dr Robert G. Webb (*University of Texas at El Paso, El Paso, Texas, U.S.A.*), Dr Mario García París (*Museo Nacional de Ciencias Naturales, Madrid, Spain*), Dr W.R. Branch (*Port Elizabeth Museum, Humewood, South Africa*), Dr David A. Good (*Louisiana State University, Museum of Natural Science, Baton Rouge, Louisiana, U.S.A.*), Dr Robert F. Inger (*Field Museum of Natural History, Chicago, Illinois, U.S.A.*), Dr David M. Hillis (*The University of Texas, Austin, Texas, U.S.A.*), Dr Francis R. Cook (*Canadian Museum of Nature, Ottawa, Canada*) and Prof Robert C. Stebbins (*University of California, Museum of Vertebrate Zoology, Berkeley, California, U.S.A.*). A note of further support from Drs Merel J. Cox (*Bangkok, Thailand*), Robert A. Thomas (*Society for Environmental Education, New Orleans, Louisiana, U.S.A.*), Joseph T. Collins (*The University of Kansas, Museum of Natural History, Lawrence, Kansas, U.S.A.*), James Lazell (*The Conservation Agency, Conanicut Island, Rhode Island, U.S.A.*), Robert C. Drewes (*California Academy of Sciences, Golden Gate Park, San Francisco, California, U.S.A*), Robert G. Zweifel (*American Museum of Natural History, New York, N.Y., U.S.A.*) and Paul Chippindale (*The University of Texas, Austin, Texas, U.S.A.*) was published at the same time.

An opposing comment from Prof Alain Dubois (*Muséum National d'Histoire Naturelle, Paris, France*) was published in BZN **52**: 183–186 (June 1995). A reply by the authors of the application, together with Dr Mark R. Jennings, was published in BZN **52**: 267–269 (September 1995).

A comment from Dr Sebastiano Salvidio (*Istituto di Zoologia, Università di Genova, Genova, Italy*), published in BZN **52**: 339–340 (December 1995), reiterated part of Dubois's text in pointing out that, whilst the usage of *Hydromantes* had generally been maintained in North America, the name *Speleomantes* Dubois, 1984 had been adopted for plethodontid species by a number of European authors during the last 10 years (cf. paras. 5 and 7 of the application), and that approval of the application would maintain stability on the North American side of the Atlantic but would cause confusion and instability on the European side. In a further comment (BZN **52**: 340–342) Dubois put forward revised proposals. He suggested that, instead

of designating the European species *Salamandra genei* as the type of *Hydromantes*, as originally proposed by Smith & Wake in their application, the American species *Spelerpes platycephalus* Camp, 1916 be designated the type, and that *Hydromantoides* (which would become a junior objective synonym of *Hydromantes*) be placed on the Official Index. Dubois proposed (BZN **52**: 341) that to avoid future confusion the disused name *Geotriton* be suppressed except for purposes of homonymy. Neither *Geotriton* nor *exigua* were mentioned, even as synonyms, in Frost (1985).

The revised proposals by Dubois were welcomed and endorsed by Smith, Wake & Jennings (BZN **53**: 48; March 1996). Smith (*in litt.*, October 1995) also noted that Dr James Hanken (*University of Colorado, Boulder, Colorado, U.S.A.*) had 'given his unqualified approval' to the proposed solution. Approval by the Commission would conserve the usage of the name *Hydromantes* for authors wishing to place both American and European plethodontid species in the genus, while leaving *Speleomantes* available for use for European species by those wishing to recognise a distinct genus or subgenus. This would maintain the stability of usage of both names.

The revised proposals, published in BZN **52**: 341–342 (December 1995), were offered for voting.

Decision of the Commission

On 16 September 1996 the members of the Commission were invited to vote on the proposals published in BZN **52**: 341–342. At the close of the voting period on 16 December 1996 the votes were as follows:

Affirmative votes — 24: Bock, Bouchet, Brothers, Cocks, Cogger, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Nye, Papp, Patterson, Savage, Schuster, Song, Štys

Negative votes — none.

Dupuis abstained.

Ride was on leave of absence.

Dupuis commented: 'I refuse to vote on this case because in my personal view the time between the last comment and the distribution of voting papers was too short. The last comment was less than one year old'. [*Editorial note*. The comment was one of support. An explanation of procedure followed in sending cases for voting is given on pp. 53–54].

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Geotriton Bonaparte, [1832], *Iconografia della fauna Italica per le quattro classi degli animali vertebrati*, vol. 2 (Amfibi), fasc. 1, pp. [243]–[244].

Hydromantes Gistel, 1848, *Naturgeschichte des Thierreiches für höhere Schulen*, p. xi.

Hydromantoides Lanza & Vanni, 1981, *Monitore Zoologico Italiano*, (n.s.)**15**: 119.

platycephalus, *Spelerpes*, Camp, 1916, *University of California Publications in Zoology*, **17**(3): 11.

OPINION 1867

Phyllophis carinata Günther, 1864 (currently *Elaphe carinata*; Reptilia, Serpentes): specific name conserved

Keywords. Nomenclature; taxonomy; Reptilia; Serpentes; snakes; COLUBRIDAE; *Elaphe carinata*; China; Japan.

Ruling

(1) Under the plenary powers it is hereby ruled that the specific name *carinata* Günther, 1864, as published in the binomen *Phyllophis carinata*, is not invalid by reason of having been replaced before 1961 as a junior secondary homonym of *Coluber carinatus* Linnaeus, 1758.

(2) The name *carinata* Günther, 1864, as published in the binomen *Phyllophis carinata* and as ruled under the plenary powers in (1) above to be not invalid by reason of having been replaced before 1961 as a junior secondary homonym of *Coluber carinatus* Linnaeus, 1758, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *phyllophis* Boulenger, 1891, as published in the binomen *Coluber phyllophis*, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology (a junior objective synonym of *Phyllophis carinata* Günther, 1864).

History of Case 2850

An application for the conservation of the specific name of *Phyllophis carinata* Günther, 1864 was received from Prof Hobart M. Smith (*University of Colorado, Boulder, Colorado, U.S.A.*), Prof Hidetoshi Ota (*University of the Ryukyus, Nishihara, Okinawa, Japan*) and Dr Van Wallach (*Center for Vertebrate Studies, Northeastern University, Boston, Massachusetts, U.S.A.*) on 4 June 1992. After correspondence the case was published in BZN **52**: 166–169 (June 1995). Notice of the case was sent to appropriate journals.

Comments in support from Dr James R. Dixon (*Texas A & M University, Texas, U.S.A.*) and from Dr Tsutomu Hikida (*Kyoto University, Kyoto, Japan*) were published in BZN **52**: 345–346 (December 1995).

A further comment in support from Dr Michihisa Toriba (*Japan Snake Institute, Gunma, Japan*) was published in BZN **53**: 50 (March 1996).

Decision of the Commission

On 16 September 1996 the members of the Commission were invited to vote on the proposals published in BZN **52**: 168. At the close of the voting period on 16 December 1996 the votes were as follows:

Affirmative votes — 23: Bock, Bouchet, Brothers, Cocks, Cogger, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Mawatari, Minelli, Nielsen, Nye, Papp, Patterson, Savage, Schuster, Song, Štys

Negative votes — none.

Dupuis abstained.

No vote was received from Martins de Souza.

Ride was on leave of absence.

Dupuis commented: 'I refuse to vote on this case because in my personal view the time between the last comment and the distribution of voting papers was too short. The last comment was less than one year old'. [*Editorial note*. The comment was one of support. An explanation of procedure followed in sending cases for voting is given on pp. 53–54].

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

carinata, *Phyllophis*, Günther, 1864, *The reptiles of British India*, p. 295.

phyllophis, *Coluber*, Boulenger, 1891, *Annals and Magazine of Natural History*, (6)**7**(39): 281.

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HISTORY
1
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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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Notices

(a) *Invitation to comment*. The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles*. At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications*. The following new applications have been received since going to press for volume 54, part 1 (published on 26 March 1997). Under Article 80 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

(1) *Iguanodon* Mantell, 1825 (Reptilia, Ornithischia): proposed designation of *I. bernissartensis* Boulenger, 1881 as the type species. (Case 3037). A.J. Charig.

(2) *Thamnotettix nigropicta* Stål, 1870 (currently *Nephotettix nigropicta*; Insecta, Homoptera): proposed conservation of the specific name. (Case 3039). M.R. Wilson.

(3) *Cicada clavicornis* Fabricius, 1794 (currently *Asiraca clavicornis*; Insecta, Homoptera): proposed conservation of the specific name. (Case 3040). M.R. Wilson & M. Asche.

(4) *Cynodon* Spix in Spix & Agassiz, 1829 and *Rhaphiodon* Agassiz in Spix & Agassiz, 1829 (Osteichthyes, Characiformes): proposed conservation. (Case 3041). M. Toledo-Piza & K.J. Lazara.

(5) *Hydrosaurus gouldii* Gray, 1838 (currently *Varanus gouldii*) and *Varanus panoptes* Storr, 1980 (Reptilia, Squamata): proposed conservation of the specific names by the designation of a neotype for *H. gouldii*. (Case 3042). R.G. Sprackland, H.M. Smith & P. Strimple.

(6) *Varanus teriae* Sprackland, 1991 (Reptilia, Squamata): proposed conservation of the specific name. (Case 3043). R.G. Sprackland, H.M. Smith & P. Strimple.

(7) Generic and specific names of birds (Aves) conventionally accepted as published in the *Proceedings of the Zoological Society of London* and

monographic works by John Gould and other contemporary zoologists: proposed suppression of all prior usages. (Case 3044). R. Schodde & W.J. Bock.

(8) *Triforis* Deshayes, 1834 and TRIFORIDAE Jousseaume, 1884 (Mollusca, Gastropoda): proposed rejection as incorrect subsequent spellings of *Triphora* Blainville, 1828 and TRIPHORIDAE Gray, 1847, with replacement of *Triforis* by *Trituba* Jousseaume, 1884. (Case 3045). P. Bouchet & B. Marshall.

(d) *Rulings of the Commission.* Each Opinion published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin.*

The International Commission on Zoological Nomenclature — Council

The membership of Council is as follows:
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Dr I. W. B. Nye
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The International Commission on Zoological Nomenclature — electronic information

Regularly updated information about the Commission is available on the World Wide Web at http://www.iczn.org.

Towards Stability in the Names of Animals

The International Commission on Zoological Nomenclature was founded on 18 September 1895. In recognition of its Centenary a history of the development of nomenclature since the 18th century and of the Commission has been published entitled '*Towards Stability in the Names of Animals — a History of the International Commission on Zoological Nomenclature 1895–1995*' (ISBN 0 85301 005 6). It is 104 pages (250 × 174 mm) with 18 full-page illustrations, 14 being of eminent zoologists who played a crucial part in the evolution of the system of animal nomenclature as universally accepted today. The book contains a list of all the Commissioners from 1895 to the present. The main text was written by R.V. Melville (former Secretary of the Commission) and has been completed and updated following his death.

Copies may be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. *or* A.A.Z.N., Attn. Dr Al Norrbom, c/o USDA Systematic Entomology Laboratory, MRC-168, National Museum of Natural History, Washington D.C. 20560, U.S.A.

The cost is £30 or $50 (including surface postage); members of the American and European Associations for Zoological Nomenclature are offered the reduced price of £20 or $35. Payment should accompany orders.

Official Lists and Indexes of Names and Works in Zoology — Second Supplement to 1990

The Official Lists and Indexes of Names and Works in Zoology was published in 1987. This book gives details of all the names and works on which the Commission has ruled since it was set up in 1895, up to 1985; there are about 9,900 entries.

Copies can be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. *or* A.A.Z.N., Attn. Dr Al Norrbom, c/o USDA Systematic Entomology Laboratory, MRC-168, National Museum of Natural History, Washington D.C. 20560, U.S.A. The cost is £60 or $110, but members of the American Association for Zoological Nomenclature or the European Association for Zoological Nomenclature are offered the reduced price of £40 or $75; payment should accompany orders.

In the five years 1986–1990, 946 names and five works were added to the Official Lists and Official Indexes. A supplement has been prepared giving these additional entries, together with some amendments and updatings to entries in the 1987 volume. Copies can be obtained without charge from either of the above addresses.

The European Association for Zoological Nomenclature

The European Association for Zoological Nomenclature (EAZN) was set up in 1992 to facilitate liaison between European zoologists and the Commission, and to provide support for the Commission. An Inaugural Council under the Presidency of Dr V. Mahnert (Switzerland) and with Dr E. Macpherson (Spain) as Secretary and Dr M.A. Alonso-Zarazaga (Spain) as Treasurer launched EAZN; their dedicated work is gratefully acknowledged.

A new Council is now being established with Dr W. Böhme (Museum Alexander Koenig, Bonn, Germany) as President and Dr Ch. Kropf (Natural History Museum, Berne, Switzerland) as Secretary.

The aims of the EAZN can be set out as follows:

(1) to facilitate the work of the Commission by providing funds;
(2) to promote liaison between the zoological community and the Commission;
(3) to promote and compile works relevant to zoological nomenclature;
(4) to disseminate information on zoological nomenclature to those institutions, organisations and individuals requesting it.

Europe has a great and long tradition in zoological systematics, and European scientists generate much of the Commission's important work. All European zoologists, and those who use scientific names of animals, are invited to support the Commission by joining EAZN. The annual membership is set at the equivalent of £20 for individuals and £40 for institutions. Members will receive a Newsletter which will be issued at least annually, and more often if required. They also benefit from considerable reductions in the price of the Commission's publications — the *Code*, the *Official Lists and Indexes of Names and Works in Zoology*, and the 1995 Centenary History entitled *Towards Stability in the Names of Animals*.

For further information, please contact: Dr Ch. Kropf, Natural History Museum, Bernastrasse 15, CH-3005 Berne, Switzerland (Phone: +31 350 7260; Fax: +31 350 7499; e-mail: chkropf@nmbe.unibe.ch).

Case 2943

Aporcelaimus Thorne & Swanger, 1936 (Nematoda): proposed designation of *Dorylaimus superbus* de Man, 1880 as the type species

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Abstract. The purpose of this application is to designate *Dorylaimus superbus* de Man, 1880 as the type species of the soil nematode genus *Aporcelaimus* Thorne & Swanger, 1936. The originally designated type species *D. regius* de Man, 1876 is indeterminate; the holotype (long destroyed) may have belonged to a species of *Sectonema* Thorne, 1930. The lectotype and other original specimens of *D. superbus* are well preserved and the species is widespread, with populations available for study.

Keywords. Nomenclature; taxonomy; Nematoda; APORCELAIMIDAE; *Aporcelaimus*; *Aporcelaimus superbus*; soil nematodes.

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1. Thorne & Swanger (1936, p. 123) included seven nominal species of soil nematodes in the new genus *Aporcelaimus*, and designated *Dorylaimus regius* de Man, 1876 (p. 92) as the type species. The genus was placed in the family DORYLAIMIDAE.

2. Many other species were subsequently assigned to *Aporcelaimus*. Heyns (1965, p. 19) pointed out that this had 'resulted in the genus practically becoming a dumping ground for all DORYLAIMINAE lacking a distinctly sclerotized anterior fixed ring for the guiding sheath [of the spear or tooth]', and he 'proposed to return to the original demarcation of this genus as intended by Thorne & Swanger (1936)'. Heyns reviewed *Aporcelaimus* and based the new family APORCELAIMIDAE (p. 6) on it; he also placed *Sectonema* Thorne, 1930 and four new nominal genera in the family. The aporcelaimids are relatively large soil nematodes, mostly predatory on oligochaetes.

3. Unfortunately *Dorylaimus regius* de Man, 1876, the type species of *Aporcelaimus*, is indeterminate. The holotype (from Leiden, The Netherlands), the only specimen studied by de Man, was dissected and destroyed (see de Man, 1876, p. 93). In erecting *Aporcelaimus* Thorne & Swanger (1936) gave (p. 124) a redescription of *D. regius*, but this was based largely on Steiner's (1924) report of specimens of '*D. regius*' from Germany and Norway and was complemented by two drawings (pl. 28) of specimens from England.

4. The original specimen of *D. regius* certainly belonged to the APORCELAIMIDAE as defined by Heyns (1965), but the drawings (de Man, 1876, pl. 3) of it show a tooth-like odontostyle; this is very unlike that drawn by Steiner (1924, figs. 2C-E) and Thorne & Swanger (1936) and the specimen may have belonged to a species of *Sectonema*.

5. From his descriptions and illustrations it is evident that the specimens studied by Steiner (1924) belong to *Aporcelaimus* as now accepted, but they cannot be assigned to a particular species: we have examined one male and four females of his material but the condition of the head ends does not permit identification. Comparison of a slide of English (St Albans) specimens of '*Aporcelaimus regius*' studied by Thorne & Swanger (1936) with the Dutch type series (see para. 7 below) of *Dorylaimus superbus* de Man, 1880 shows the specimens to be conspecific, and a male from Liverpool on a second slide of theirs probably also belongs to *D. superbus*. The Thorne & Swanger specimens may well have come from the population from St Albans described by Goodey (1951, p. 288, fig. 145) under the name *Aporcelaimus superbus* (de Man, 1880).

6. A number of workers have used the name *Aporcelaimus regius*, but in all cases the reports lack details which would enable the species to be identified or to be compared with de Man's original material. Such works include Brakenhoff (1913), Schneider (1923), Allgén (1925), Tulaganov (1949), Meyl (1954), Popovici (1968), Altherr (1974) and Tulaganov & Usmanova (1978).

7. In order to differentiate *Aporcelaimus* from other genera it is necessary to have a properly defined type species, and *Dorylaimus regius* certainly does not meet this criterion. A suitable type species is *D. superbus* de Man, 1880 (p. 79), which for nearly 50 years has consistently been placed in *Aporcelaimus*. As mentioned in para. 5 above, specimens of *A. superbus* were used by Thorne & Swanger (1936) for their redescription of '*Dorylaimus regius*' and their designation of that nominal species as the type species of *Aporcelaimus*. The five original specimens are preserved in de Man's 'Hollandsche Collectie', now at the Zoological Museum, Instituut voor Taxonomische Zoologie, P.O. Box 4766, 1009 AT Amsterdam. They have been described by Loof (1961), who (p. 237) designated a female (original registration H 36, now V.As 253) from Katwijk (The Netherlands) as the lectotype. The paralectotypes are registered as V.As 250, 251, 252 and 373. *A. superbus* is a widespread species, unlike most aporcelaimids, and populations are available for study.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Aporcelaimus* Thorne & Swanger, 1936 and to designate *Dorylaimus superbus* de Man, 1880 as the type species;

(2) to place on the Official List of Generic names in Zoology the name *Aporcelaimus* Thorne & Swanger, 1936 (gender: masculine), type species *Dorylaimus superbus* de Man, 1880 by the designation in (1) above;

(3) to place on the Official List of Specific Names in Zoology the name *superbus* de Man, 1880, as published in the binomen *Dorylaimus superbus* (specific name of the type species of *Aporcelaimus* Thorne & Swanger, 1936).

Acknowledgement

We thank Dr A. Morgan Golden (Beltsville, Maryland, U.S.A.) for putting specimens described by Steiner (1924) and Thorne & Swanger (1936) at our disposal; these are preserved in the USDA collection at Beltsville.

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Case 2996

Pila Röding, 1798 and *Pomacea* Perry, 1810 (Mollusca, Gastropoda): proposed placement on the Official List, and AMPULLARIIDAE Gray, 1824: proposed confirmation as the nomenclaturally valid synonym of PILIDAE Preston, 1915

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Abstract. One purpose of this application is to place the names *Pila* Röding, 1798 and *Pomacea* Perry, 1810 on the Official List. The names refer, respectively, to Old and New World genera of freshwater operculate gastropods, known as apple snails, which are widely distributed over the tropics and subtropics, except the Australian region. The name *Ampullaria* Lamarck, 1799, a junior objective synonym of *Pila*, is sometimes used for both the Old and New World species, while *Ampullarius* de Montfort, 1810 has also been used for New World taxa. A second purpose of this application is to propose that AMPULLARIIDAE Gray, 1824 (type genus *Ampullaria*) be confirmed as the nomenclaturally valid name for the family, which includes ten genera and some 100 species. The objectively synonymous name PILIDAE Preston, 1915 is also in use by some authors. One or more species have recently become agricultural pests in south east Asia and in the Pacific Islands.

Keywords. Nomenclature; taxonomy; Gastropoda; *Pila*; *Pomacea*; *Ampullaria*; *Ampullarius*; AMPULLARIIDAE; PILIDAE; apple snails; agricultural pests.

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1. The question of the validity of the generic name *Ampullaria* Lamarck, 1799 was first raised with the Commission in 1930 by H.A. Pilsbry and H.B. Baker. They applied to place 12 mollusk generic names on the Official List, an action which at that time implied conservation. Six of the names were placed on the List in Opinion 119 (January 1931) but the views of the mollusk specialists consulted were divided over the remaining names, including *Ampullaria*, and a decision on these was deferred. The Commission Secretariat has had correspondence on *Ampullaria* during the past 50 years but no further application has been published until now. There were no detailed rules for family-group names until publication of the 1961 edition of the Code.

2. Röding (1798, p. 145) proposed the generic name *Pila* for six species of freshwater snails, including the Asian species *Helix ampullacea* Linnaeus, 1758 (p. 771). The latter is the type species of *Pila* by subsequent designation by Dall (1904, p. 53). The name *Ampullaria* Lamarck, 1799 (p. 76) was introduced for the single species *H. ampullacea*, which is therefore the type of *Ampullaria* by monotypy. Dall's (1904) designation of *H. ampullacea* as the type species of *Pila* rendered *Ampullaria* a junior objective synonym of *Pila* despite his (invalid) designation of the New World *Nerita urceus* Müller, 1774 (p. 174) as the type of *Ampullaria* (see Pain, 1972, p. 455; Berthold, 1991, p. 247). The six taxa originally included in *Pila* by Röding (1798)

were both Old and New World species, although the name as currently used is restricted to Old World taxa. *Pila* and most Old World taxa have a calcareous operculum; in all New World genera the operculum is horny.

3. The *Museum Boltenianum* (1798), in which the name *Pila* first appeared, was a catalogue compiled by J.F. Bolten of his large mollusk collection. It was prepared for publication as a sales catalogue after Bolten's death by P.F. Röding, who added the synonyms used in Gmelin's ([1791]) edition of Linnaeus's *Systema Naturae* and references to published figures. New generic names published in the work were largely ignored in the 19th and first part of the 20th centuries because very few copies of the work were known before the publication of a fascimile edition (of 75 copies) in 1906; the new genera were not described, their identity being determined only by the included nominal species which were themselves recognized only by bibliographic references to published figures; many authors considered that new names published in sale catalogues were not available; and adoption of the new names would have cast into synonymy many of the familiar names introduced by Lamarck the following year. Dall (1904) was the first author to adopt names published in the *Museum Boltenianum* but it was not until 1926 (Opinion 96) that the work was accepted by the Commission as being available. It was placed on the Official List in 1956 (Direction 48) with authorship attributed to P.F. Röding. No diagnosis was given for *Pila* but the included species were accompanied by references to the names, publications and illustrations of previous authors. *Pila* Röding, 1798 is therefore available under Articles 12b(5) and 12b(7) of the Code.

4. Authors in the 19th and first part of the 20th centuries (see, for example, Philippi, 1851; Reeve, 1856; Martens, 1873; Sowerby, 1909; Kobelt, 1911 1915; and Alderson, 1925) used the name *Ampullaria* Lamarck for species from both the Old and New Worlds. Considerable confusion has persisted since the publication of Opinion 96 because some authors have continued to overlook or disregard priority by using *Ampullaria* rather than *Pila* for the Old World species and, following Dall's (1904) invalid type designation, especially for New World species generally now placed in the genus *Pomacea* (para. 5 below) (see, for example, the recent publications of Martin, 1986; Lanzer & Schafer, 1987; Pointier, Théron & Imbert Establet, 1988; Vaught, 1989; and Anderson, 1993).

5. In 1801 Lamarck (p. 93) published on *Ampullaria* again and included the New World nominal species *A. rugosa* Lamarck, 1801 (a junior synonym of *Nerita urceus* Müller, 1774; see de Montfort, 1810; Reeve, 1856; and Martens, 1873). Lamarck added to his (1799) diagnosis 'muni d'un opercule corné' (with a horny operculum). Dall (1904) designated (invalidly, see para. 2 above) *N. urceus* as the type of the genus. In 1810 de Montfort (pp. 242 (fig.) and 243 (text)) applied the name *Ampullarius* to *N. urceus* Müller, 1774 (= *A. rugosa* Lamarck); de Montfort cited Lamarck and emended the latter's name *Ampullaria* to *Ampullarius* ('Ampullaire; en latin, *Ampullarius*'). The name *Ampullarius* de Montfort, 1810 was adopted as valid by many authors for New World species (see Pain, 1956, p. 79; de Oliveira, Rezende & de Castro, 1981, pp. 76 78). Perry (1810, pl. 11 and text, signature G5) introduced the name *Pomacea* for his single new species, *Pomacea maculata*, which was considered by Berthold (1991, p. 248) as a possible junior synonym of *N. urceus* Müller, 1774, although Pilsbry (1927, p. 63) and Pain (1956, p. 79; 1960, pp. 421, 423, 426) had previously retained *urceus* as distinct and synonymised *P. maculata* Perry,

1810 with *Ampullaria gigas* Spix, 1827. However, all three of these nominal species are South American and currently placed in *Pomacea*. The name *Pomacea* was attributed for many years to Perry (1811, text and pl. 3, fig. 3) and cited as a junior synonym of *Ampullarius*. The availability of *Pomacea* from 1810 was overlooked until Mathews & Iredale (1912) published a paper on Perry's little-known work *Arcana*, which was issued in monthly parts (pls. [1 48] in 1810 and pls. [49–84] in 1811). Subsequently the validity of *Pomacea* Perry, 1810 (March) over *Ampullarius* de Montfort, 1810 (after March) was recognized (see Pain, 1956, p. 79; 1960, p. 421; Berthold, 1991, p. 248). The name *Pomacea* refers to New World taxa, some of which have lately been introduced into Asia.

6. I propose that the names *Pila* Röding, 1798 and *Pomacea* Perry, 1810 be placed on the Official List in accord with priority and majority usage as the names for, respectively, the Old and New World groups of species, and that *Ampullaria* Lamarck, 1799 and *Ampullarius* de Montfort, 1810 (an unjustified emendation of *Ampullaria*) be placed on the Official Index as junior objective synonyms of *Pila*.

7. Gray (1824, p. 276) introduced the family name AMPULLARIIDAE (as 'AMPULLARIADAE'), based on *Ampullaria* Lamarck and including both Old and New World taxa. Preston (1915a, p. 96), acknowledging the synonymy of *Pila* Röding, 1798 and *Ampullaria* Lamarck, 1799 and the priority of the former, introduced the name PILIDAE as a new name for AMPULLARIIDAE, perhaps, although not explicitly, considering AMPULLARIIDAE invalid because the generic name on which it was based was a junior synonym. Since the names of their type genera are objectively synonymous the same is true of the family names.

8. Article 40b of the Code states that, if a family-group name (in this case AMPULLARIIDAE) had been replaced before 1961 because the generic name on which it was based is recognized as a junior synonym, then the replacement name (in this case PILIDAE) is to be maintained providing that it has 'won general acceptance'. AMPULLARIIDAE is the earlier name; PILIDAE has been widely used and remains in use by some authors (see, for example, Keawjam, 1986, 1990; Mochida, 1991; Neck & Schultz, 1992; Halwart, 1994), possibly in the mistaken belief that usage of a family-group name is dependent on its name bearing genus being currently used as a valid name. Arguably, however, the name PILIDAE, although widely used, has not won 'general acceptance'. AMPULLARIIDAE also continues to be used (see, for example, Ponder & Warén, 1988; Cazzaniga, 1990; Berthold, 1991; Smith, 1992; Donnay & Beissinger, 1993; Eldredge, 1994; Cowie, 1995). Berthold (1991, p. 245) provided representative lists of publications using AMPULLARIIDAE and those using PILIDAE but considered that few people preferred PILIDAE. Even Preston himself (the author of PILIDAE) continued to use AMPULLARIIDAE in compiling the Mollusca section of *Zoological Record* from 1915 to 1919 (for publications from 1913 to 1916, see Preston, 1915b, 1916, 1917 and 1919), and even though he included his own publication with the introduction of the name PILIDAE. Conolly (1919, p. 37), following Preston as the compiler of the Mollusca section of *Zoological Record*, continued to use AMPULLARIIDAE. There is a huge literature dealing with the family. Lists of 48 representative publications using AMPULLARIIDAE and 21 publications using PILIDAE are held by the Commission Secretariat; a single additional publication gave both names as equally valid. The name AMPULLARIIDAE currently appears to be the more widely used.

9. PILIDAE Preston, 1915 has thus not won general acceptance and therefore it does not fulfil the requirements of Article 40b which would maintain it as the valid name. AMPULLARIIDAE Gray, 1824 should therefore be retained as the valid name. Members of the family are commonly known as apple snails and are frequently used as domestic aquarium snails. Some species have recently become extremely serious pests of rice and other crops in south east Asia and of taro in Pacific Islands (Acosta & Pullin, 1991; Mochida, 1991; Smith, 1992; Anderson, 1993; Eldredge, 1994; Cowie, 1995). In retaining the earlier name AMPULLARIIDAE the interests of stability would be served in a group that is likely to attract increasing attention. However, since both PILIDAE and AMPULLARIIDAE remain in current use and 'general acceptance' is open to interpretation, the case is referred to the Commission for a ruling.

10. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to confirm that the family-group name AMPULLARIIDAE Gray, 1824 is the nomenclaturally valid synonym of PILIDAE Preston, 1915;

(2) to place on the Official List of Generic Names in Zoology the following names:
   (a) *Pila* Röding, 1798 (gender: feminine) (senior objective synonym of *Ampullaria* Lamarck, 1799), type species by subsequent designation by Dall (1904) *Helix ampullacea* Linnaeus, 1758;
   (b) *Pomacea* Perry, 1810 (gender: feminine), type species by monotypy *Pomacea maculata* Perry, 1810;

(3) to place on the Official List of Specific Names in Zoology the following names:
   (a) *ampullacea* Linnaeus, 1758, as published in the binomen *Helix ampullacea* (specific name of the type species of *Pila* Röding, 1798);
   (b) *maculata* Perry, 1810, as published in the binomen *Pomacea maculata* (specific name of the type species of *Pomacea* Perry, 1810);

(4) to place on the Official List of Family Group Names in Zoology the name AMPULLARIIDAE Gray, 1824, type genus *Ampullaria* Lamarck, 1799 (a junior objective synonym of *Pila* Röding, 1798);

(5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
   (a) *Ampullaria* Lamarck, 1799 (a junior objective synonym of *Pila* Röding, 1798);
   (b) *Ampullarius* de Montfort, 1810 (an unjustified emendation of *Ampullaria* Lamarck, 1799 and a junior objective synonym of *Pila* Röding, 1798);

(6) to place on the Official Index of Rejected and Invalid Family–Group Names in Zoology the name PILIDAE Preston, 1915 (a junior objective synonym of AMPULLARIIDAE Gray, 1824 and invalid by the ruling given in (1) above).

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Case 2990

Disparalona Fryer, 1968 (Crustacea, Branchiopoda): proposed conservation

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Abstract. The purpose of this application is the conservation of the freshwater branchiopod generic name *Disparalona* Fryer, 1968 (Anomopoda, CHYDORIDAE) by the suppression of *Phrixura* Müller, 1867. The latter genus and its type species *P. rectirostris* Müller, 1867 were based on a single deformed individual now recognised as belonging to *Lynceus rostratus* Koch, 1841, the type species of *Disparalona*. The name *Phrixura* has been ignored since its original publication but it has been suggested recently that it should displace *Disparalona*, a name in wide use.

Keywords. Nomenclature; taxonomy; Branchiopoda; CHYDORIDAE; *Disparalona*; *Disparalona rostrata*; *Phrixura*.

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1. The widespread freshwater branchiopod (Anomopoda, family CHYDORIDAE) known in recent literature as *Disparalona rostrata* (Koch, 1841) (species 12 (3 figs.), Heft 36) was originally placed in the genus *Lynceus* P.L.S. Müller, 1776. Lillejeborg (1853, p. 78, pl. 6, fig. 8; 1900, p. 482, pl. 69, figs. 7–21) used the name *L. rostratus*, but Sars (1862, p. 301) placed the species in his new genus *Alonella*. P.E. Müller (1867, p. 182) allocated it to *Alona* Baird, 1843 (the latter date was cited correctly by Smirnov (1971) and Negrea (1983) but was wrongly given as 1850 by Flössner (1972) and Frey (1989)).

2. In the 19th century the species was included in *Lynceus*, *Alonella* or *Alona*, but in 1908 Stingelin transferred it to *Rhynchotalona* Norman, 1903. Until 1968 authors accepted either this placement or continued to cite *rostrata* in *Alonella* (see synonymic lists in Smirnov, 1971, Flössner, 1972 and Michael & Frey, 1984).

3. One finding in a comparative survey (Fryer, 1968) of the functional morphology of representatives of several chydorid genera was that the species in question has distinctive morphological attributes associated with an equally distinctive feeding mechanism: in particular it has an enormously developed sweeping seta on the gnathobase of the third trunk limb, which in life is in almost incessant motion sweeping along the food groove. As this set the species apart from other genera I (Fryer, 1968, p. 286) proposed the new genus *Disparalona* to accommodate it. Other species have since been transferred to or erected in *Disparalona* (see Fryer, 1971; Smirnov, 1971; Michael & Frey, 1984).

4. At the same time as he placed Koch's species *rostrata* in *Alona*, Müller (1867, p. 184) described a new genus and species *Phrixura rectirostris* on the basis of a single specimen with a much distorted postabdomen, in which the claws were lacking and the spines arose in a manner not found in any normal chydorid postabdomen. Müller was not aware that he was dealing with an abnormal individual. His account included a single illustration (pl. 4, fig. 15) of the deformed postabdomen only and his

taxon long remained an enigma. As Frey (1989, p. 124) accurately noted, Müller's illustration 'doesn't give any hint of the taxon involved, nor really does the verbal description either. Hence, scientists have not been able to do anything with it'. The name *Phrixura* was never used for 122 years, until Frey (1989) reintroduced it following his discovery some years earlier (see para. 6 below) of Müller's slide in the Zoologisk Museum of the University of Copenhagen. The specimen proved to be an aberrant ephippial female of *Disparalona rostrata*. Unknown to Frey, Müller had made two illustrations of this individual, only one of which was published. Røen (1994) subsequently discovered Müller's original illustrations in Copenhagen and published them (pl. 39, figs. 1 and 2); the additional figure of the whole animal gives a tolerably good indication of its real identity. Müller had also made two figures of *Alona rostrata* (Koch) but published only that of the postabdomen; both were published by Røen (1994, pl. 39, figs. 3–4).

5. On the ground that the name *Disparalona* Fryer, 1968 is predated by *Phrixura* Müller, 1867, Frey (1989, p. 105) stated that Koch's species *Lynceus rostratus* 'now must go by the name *Phrixura rostrata*'. There are several reasons for rejecting this suggestion, as mentioned in the following paragraphs.

6. The binomen *Phrixura rectirostris* was entirely based on deformities which do not exist in normal individuals and are not characters of any taxon. As already stated, in the same paper as that in which he erected the generic name *Phrixura*, Müller placed *Lynceus rostratus* Koch in *Alona*, as *A. rostrata*. Had he realised that he was dealing merely with a teratological specimen of *A. rostrata* obviously he would not have proposed the nominal species *Phrixura rectirostris*. The characters by which *Phrixura* was defined have no significance whatsoever and are entirely misleading. The taxon remained unrecognised, and from Müller's publication was unrecognisable, for more than a century and would have continued to be so had Frey not found the original specimen. Ironically, Michael & Frey (1984, p. 82) list *Phrixura rectirostris* as a synonym of *Disparalona rostrata* on the basis of Frey's then unpublished discovery of the true identity of the former, and explicitly state that *P. rectirostris* 'is an abnormal specimen of *D. rostrata*'. Frey (1987) continued to use the name *Disparalona*, and even in 1989 (at the same time as reintroducing *Phrixura*) he reported (p. 124) that Müller's ancient specimen 'is unequivocally *Disparalona rostrata*'!

7. In contrast to *Phrixura*, the name *Disparalona* has been used in numerous publications, including monographs on the CHYDORIDAE of the world (Smirnov, 1971, p. 272 [English translation 1974]), and more recently of Germany (Flössner, 1972; p. 336), China (Chiang & Du, 1979, p. 236), Kazakhstan (Ibrasheva & Smirnova, 1983, p. 79), Malaysia (Idris, 1983, p. 56) and Romania (Negrea, 1983, p. 258). Some of these have very good illustrations of *Disparalona* species. It was used by Whiteside (1970) in a comprehensive survey of the CHYDORIDAE of Denmark, and by Frey in the new Prologue (p. xix) to a 1982 facsimile reprint of Lilljeborg's monograph of 1900. As noted above, *Disparalona* was the name used by Michael & Frey (1984), whose excellent line drawings (pls. 1–3) and SEM photographs (pls. 4–7) are the most detailed and comprehensive available. It would be destabilising and in direct contravention of Article 23b of the Code to displace the established name *Disparalona* by *Phrixura*, a name based entirely on a teratological character, ignored for over a century, and never used in any taxonomic publication until that of Alonso (1996), which appeared while this application was in press.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the name *Phrixura* Müller, 1867 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the name *Disparalona* Fryer, 1968 (gender: feminine), type species by original designation *Lynceus rostratus* Koch, 1841;

(3) to place on the Official List of Specific Names in Zoology the name *rostratus* Koch, 1841, as published in the binomen *Lynceus rostratus* (specific name of the type species of *Disparalona* Fryer, 1968);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Phrixura* Müller, 1867, as suppressed in (1) above.

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Case 2986

Dasineura Rondani, 1840 (Insecta, Diptera): proposed designation of *Tipula sisymbrii* Schrank, 1803 as the type species

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Abstract. The purpose of this application is to conserve the economically important gall midge genus *Dasineura* Rondani, 1840 in the generally understood concept by designation of *Tipula sisymbrii* Schrank, 1803 as its type species. Rondani (1856) designated one of the two originally included species, *D. obscura* Rondani, 1840, as type species, but his description of both the genus and the two species was so general as to make them unrecognizable. He subsequently (1860) designated *Tipula sisymbrii* as type species and it is proposed that this designation be validated.

Keywords. Nomenclature; taxonomy; Diptera; CECIDOMYIIDAE; gall midges; agricultural pests; *Dasineura*; *Dasineura sisymbrii*.

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1. Rondani (1840, p. 12) described the genus *Dasineura*, delimiting it by a very sketchy description that could fit almost any species now placed not only in *Dasineura* but also its related genera. He included two new species, *D. luteofusca* (p. 17) and *D. obscura* (p. 18), but did not designate either as type. Rondani later (1856, p. 200) listed *Dasineura* in a key and noted 'Spec: Typ: *Dasineura Obscura* Rndn.', thereby designating *D. obscura* as the type species.

2. *Dasineura obscura* is unrecognizable. The original description (in Latin) is: '1/3 of a line long, dark, wing reddish basally, halteres white, and legs variably colored'.

With the accompanying generic description, Rondani (1840) provided figures of parts of the male and female antennae, palpi, and a wing of an unspecified *Dasineura*. *D. obscura* has not been recognized since 1840. The type specimens are lost; they are not in the Rondani collection of CECIDOMYIIDAE in Florence, and a recent search by two of us of entomological collections in Bologna, Parma and Milan failed to uncover other Rondani specimens of CECIDOMYIIDAE (Gagné & Solinas, 1996, p. 73).

3. Loew (1850, p. 12) did not recognize Rondani's genus or species, and Kieffer (1900, p. 440) pointed out that Rondani's species of *Dasineura* were unrecognizable from their descriptions alone. For this reason Loew rejected *Dasineura* as invalid, but Kieffer (1900) thought the characterization of the short radial wing vein was enough to place the genus. Kieffer (1913, p. 72) later changed course, using *Perrisia* Rondani, 1846 in place of his earlier use of *Dasineura*, and leaving *Dasineura* as a doubtful genus with its two unrecognizable species, *obscura* and *luteofusca*. However, Felt (1915, p. 115) treated *Perrisia* as a junior synonym of *Dasineura* on account of the similarity of the short R5 wing vein of both genera, and that synonymy has been followed to the present day. However, it is now recognized that many genera of the tribe OLIGOTROPHINI, to which *Dasineura* belongs, have a wing with a short radial wing vein so it is not possible to say to which genus the specimen figured by Rondani (1840) belonged.

4. The valid type species of *Dasineura* is *D. obscura* as designated by Rondani in 1856 (see para. 1 above). However, four years later he (Rondani, 1860, p. 288) recorded against *Dasineura* 'Sp. Typ.: Tip. Sisymbri. *Schr. Wntz.*'. making it clear that he regarded *Tipula sisymbrii* Schrank, 1803 (p. 83) as the type species. This is a well known (Möhn, 1955; Buhr, 1965; Sylvén, 1975; Sylvén & Tastás-Duque, 1993) and wide ranging European species (Skuhravá, 1986); its designation fits the concept of *Dasineura* as generally understood. However, *Dasineura sisymbrii* was not the original type species designated by Rondani and was not one of the species originally included in *Dasineura*. To maintain the accepted concept of *Dasineura* we propose that *Tipula sisymbrii* Schrank, 1803 be accepted as its type species.

5. Over 450 described species of *Dasineura* are known from all over the world, 288 from the Palaearctic Region alone (Skuhravá, 1986). Many of them are pests of economic importance, including *Dasineura alopecuri* (Reuter, 1895) on foxtail grass; *D. brassicae* (Winnertz, 1853) on cruciferous crops; *D. leguminicola* (Lintner, 1879) on clovers; *D. mali* (Kieffer, 1898) on apple; *D. oleae* (Löw, 1885) on olive; and *D. plicatrix* (Loew, 1850) on blackberries and raspberries. The name *Dasineura* appears 192 times in titles or descriptors in the Commonwealth Agricultural Bureaux (now CAB International) database for the years 1984 to 1994 inclusive.

6. The spelling of Rondani's name *Dasineura* was emended to *Dasyneura* by Agassiz (1846, p. 11), and this spelling has sometimes been used. However, it is an unjustified emendation and also a junior homonym of another dipteran genus *Dasyneura* Saunders, 1842 (p. 60) which Saunders placed in the MUSCIDAE.

7. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all fixations of type species for the nominal genus *Dasineura* Rondani, 1840 prior to that by Rondani (1860) of *Tipula sisymbrii* Schrank, 1803;

(2) to place on the Official List of Generic Names in Zoology the name *Dasineura* Rondani, 1840 (gender: feminine), type species by subsequent designation by Rondani (1860) *Tipula sisymbrii* Schrank, 1803 by the ruling in (1) above;
(3) to place on the Official List of Specific Names in Zoology the name *sisymbrii* Schrank, 1803, as published in the binomen *Tipula sisymbrii* (specific name of the type species of *Dasineura* Rondani, 1840);
(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Dasyneura* Agassiz, 1846 (unjustified emendation of *Dasineura* Rondani, 1840 and junior homonym of *Dasyneura* Saunders, 1842).

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Case 3042

Hydrosaurus gouldii Gray, 1838 (currently *Varanus gouldii*) and *Varanus panoptes* Storr, 1980 (Reptilia, Squamata): proposed conservation of the specific names by the designation of a neotype for *H. gouldii*

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Abstract. The purpose of this application is to conserve the near universal usage of the name *Varanus gouldii* (Gray, 1838) for the sand monitor or Gould's goanna which is found over most of Australia, and of *V. panoptes* Storr, 1980 for the yellow-spotted monitor from areas of western and northern Australia, New Guinea and Indonesia (family VARANIDAE). The present lectotype of *V. gouldii* is a specimen of *V. panoptes*, formally rendering the name *panoptes* a junior synonym of *gouldii*. It is proposed that the lectotype of *gouldii* be set aside and a neotype designated in accord with accustomed usage.

Keywords. Nomenclature; taxonomy; Reptilia; Squamata; VARANIDAE; lizards; sand monitor; Gould's goanna; yellow-spotted monitor; *Varanus gouldii*; *Varanus panoptes*; Australia; New Guinea; Indonesia.

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1. John Edward Gray was Keeper of Zoology at the British Museum, London, during the middle of the 19th century. He was responsible for describing and naming many taxa of the Australian herpetofauna. This included a large species of lizard which in 1838 (p. 394) he named *Hydrosaurus gouldii* in honour of the naturalist John Gould. As was then the custom, Gray did not refer to any type material.

2. Gray prepared an illustrated account of the lizard fauna of Australia and New Zealand collected during the 1839–1843 voyage to Antarctica led by Sir James Clark Ross. This had an interrupted publication in three works over 30 years (see Shea, 1995, pp. iii vi). The first eight pages and pls. 1–4, 8–9, 12–14 and 20 were published in 1845 in vol. 2 of *The Zoology of the Voyage of H.M.S.* Erebus & Terror. The plates of this publication were reissued by Gray in 1867 under the title *The lizards of Australia and New Zealand*, and pls. 7, 10, 11 and 15–19 were added. Completion of

the publication of the reptile section of the *Zoology* was accomplished by A. Günther in 1875 after Gray's death; the 1867 publication was reissued and pp. 9–19 and pls. 5 and 6 were included for the first time. Gray (1845, pl. 3) described and illustrated a lizard under the name *Monitor gouldii* (Gray, 1838), from 'Western and North-western coast of Australia'. The plate, but not the description, was repeated in 1867 and 1875. The illustration clearly depicts a specimen with a dark tail with thin, indistinct pale bands. The tail tip is not distinctly yellow. The specimen is not *Varanus gouldii* as later understood but is conspecific with *V. panoptes* Storr, 1980 (see para. 4 below).

3. In 1958 Mertens (p. 248) designated a lectotype for *Hydrosaurus gouldii* Gray, 1838, now placed in *Varanus* Merrem, 1820. The specimen (catalogue no. BMNH 1.17a in the Natural History Museum, London, Gould collection; re-registered after the Second World War as 1946.9.7.61) was collected in northwestern Australia in 1837. It had been dried, stuffed and mounted.

4. In 1980 Storr published a review of the varanids of western Australia and distinguished a new species of large lizard as *Varanus panoptes*. He divided *V. panoptes* into two subspecies with disjunct ranges (fig. 10): the nominotypical subspecies (p. 273), based on the holotype R44792 in the Western Australian Museum, Perth, was from northern Australia; the subspecies *V. panoptes rubidus* (p. 276, pl. 8), based on the holotype R19132 in the Western Australian Museum, was from western Australia. These subspecies were later considered to belong to a single taxon (see Cogger, Cameron & Cogger, 1983, p. 131). Although Storr's new species *V. panoptes* was similar to and sympatric with *V. gouldii* Gray, 1838, in conducting his research Storr unfortunately did not examine Merten's lectotype of *V. gouldii* or refer to its designation.

5. Böhme (1991, fig. 1) demonstrated that Storr's *Varanus panoptes* and the lectotype of *V. gouldii* are conspecific. Mertens's (1958) lectotype specimen is dark brown, with a strongly spotted back, with rows of large dark spots alternating with smaller rows of light spots, and the tip of the tail is variegated with brown and dark brown; there is no uniformly yellow tail-tip. These diagnostic characters were used by Storr to distinguish his *V. panoptes* from *V. gouldii*. Böhme pointed out that, under the Code, the names *gouldii* and *panoptes* were synonyms and, applying strict priority, that the name *gouldii* should be used in place of *panoptes*, and that a new name was required for *gouldii* as currently understood, the first available being *flavirufus* Mertens, 1958 (p. 250; originally published as the subspecies *V. gouldii flavirufus*).

6. The specific names of *Varanus gouldii* and *V. panoptes* refer to two distinct biological taxa with different habitats and feeding requirements (see Shine, 1986). The name *gouldii*, as it has been used for 160 years and as currently used, refers to the sand monitor or Gould's goanna which is the most widespread monitor in Australia. It is found over most of the continent in woodland, shrubland and grassland on sandy soils. It eats mainly terrestrial prey. The name *panoptes* refers to the yellow-spotted monitor which is found in areas of northern and western Australia, New Guinea and Indonesia (para. 4 above). It is found on hard-packed ground associated with water, and eats mainly aquatic prey.

7. The names *Varanus gouldii* and *V. panoptes* are well entrenched in the literature and are still in use in their accustomed meanings after Böhme's (1991) paper. Recent

publications in which both names have appeared include Cogger, Cameron & Cogger (1983, pp. 129–130), Storr, Smith & Johnstone (1983), Wilson & Knowles (1988, pp. 356–358, pls. 657, 662, 663), Mattison (1989, p. 173), Covacevich & Couper (1991), Cogger (1992, pp. 366–368, 370 and plates), Ehmann (1992, pp. 149, 152), Sprackland (1992, pp. 85–92, 115–116), Glasby, Ross & Beesley (1993), Green & King (1993, pp. 8, 9), Press, Brock & Andersen (1995, p. 190), Steel (1996) and Switak (1996). Card & Kluge (1995, p. 276) noted: 'We follow Cogger (1992), not Böhme (1991), concerning the nomenclature of *V. gouldii* and *V. panoptes*'. In addition the name *gouldii* has appeared in publications by Frith (1987), Heatwole & Taylor (1987) and Hoser (1989, p. 115, figs. 288–293). Both *V. gouldii* and *V. panoptes* feature in documentation relating to conservation of protected species and their names are listed in the *World checklist of threatened amphibians and reptiles* (1993, pp. 48, 49) and in the most recent publication (1996) issued by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). *Varanus panoptes* has been the subject of at least one legal case in Australia (Neil Davie and the Victorian Association of Amateur Herpetologists, personal communication). The name *flavirufus* Mertens, 1958 has rarely appeared and to our knowledge has never been used in place of *gouldii*.

8. The names *Varanus gouldii* and *V. panoptes* are universally used and understood for their respective taxa. All the information in the considerable literature that deals with the species is carried under these names and to abandon the use of the well-known name *panoptes*, to switch the name *gouldii* from one taxon to another, and to adopt the virtually unused name *flavirufus* in place of *gouldii* as currently understood, as proposed by Böhme (1991), would cause enormous confusion. Some authors would follow the changes whilst others would not. Literature research would be difficult in that, without an explanation, it would be impossible to ascertain in which sense the name '*gouldii*' was being used, and any worker unaware of the nomenclatural situation might well think that *gouldii* (in the traditional sense) and *flavirufus* referred to two separate taxa. Such nomenclatural changes would be particularly difficult for non-systematists (those involved in ecology, conservation, behaviour studies and physiological research, for example) to grasp.

9. We propose that the specific names of *Varanus gouldii* (Gray, 1838) and *V. panoptes* Storr, 1980 be retained in their accustomed usages by setting aside Mertens's (1958) lectotype as the name-bearing specimen of *V. gouldii* and designating a neotype in accord with usage. This action would remove *panoptes* from the synonymy of *gouldii*, so allowing the usage of both names to continue. This approach is in accord with the Code, which urges nomenclatural stability in the use of names. We propose that specimen BMNH 1.17b in the reptile collections of the Natural History Museum, London, be designated as the neotype of *Hydrosaurus gouldii* Gray, 1838. The specimen is 372 mm (svl), stuffed and mounted, with part of the tail missing. It is listed in the Accessions Register as 'Northwestern Australia. From Mr Gould's collection', and displays the characteristic features of *Varanus gouldii* as traditionally understood (tail distally yellow, tail rings neither distinct nor of evenly-distributed spots, and the dorsal pattern irregular, contrasting with the regularly-spaced, distinctly round spots of *V. panoptes*). We find it fitting that the proposed neotype is a specimen from the collection of the species's namesake.

10. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous type fixations for the nominal species *Hydrosaurus gouldii* Gray, 1838 and to designate as neotype the specimen BMNH 1.17b in the Natural History Museum, London;

(2) to place on the Official List of Specific Names in Zoology the following names:
   (a) *gouldii* Gray, 1838, as published in the binomen *Hydrosaurus gouldii* and as defined by the neotype designated in (1) above;
   (b) *panoptes* Storr, 1980, as published in the binomen *Varanus panoptes* and as defined by the holotype (catalogue no. R44792 in the Western Australian Museum, Perth).

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We are grateful to Dr Susan Evans, Mrs Anthea Gentry (ICZN Secretariat), Dr Colin McCarthy and Dr Garth Underwood for discussions and perspectives on the application of the Code in this case. Dr E.N. Arnold and Dr McCarthy kindly provided R.G.S. access to the specimens in their care at the Natural History Museum, London. We thank Dr Wolfgang Böhme, Geoffrey N. Swinney and Neil Davie for their comments.

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Case 3043

Varanus teriae Sprackland, 1991 (Reptilia, Squamata): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of *Varanus teriae* Sprackland, 1991 for a tree monitor from northeastern Australia. The name is threatened by the earlier but obscurely published and rarely used name *Odatria keithhorneri* Wells & Wellington, 1985 which was based on the same type specimen. It is proposed that the latter name be suppressed.

Keywords. Nomenclature; taxonomy; Reptilia; Squamata; VARANIDAE; lizards; tree monitors; *Varanus teriae*; Australia.

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1. In 1980 (pp. 103–109, pl. 1) Gregory Czechura reported on specimens of tree monitors from the rain forest of central coastal Cape York Peninsula, northeastern Australia, in the collections of the Queensland Museum, Brisbane, which he identified as melanistic examples of *Varanus prasinus* (Schlegel, [1839]) (p. 78, pl. 22, fig. 5), the emerald or green tree monitor, previously known only from New Guinea and adjacent islands. Hitherto the species had been occasionally listed as being represented in the continental Australian herpetofauna but there were no preserved specimens to substantiate the claim. Czechura (1980) used available identification keys to differentiate his specimens from three nominal subspecies of *V. prasinus* and, although noting the very different coloration and more prominent body keels, tentatively identified them as the first records of the nominate *V. prasinus prasinus* for mainland Australia.

2. In 1982 one of us (R.G.S.) undertook a taxonomic revision of the *Varanus prasinus* species group. Sprackland read Czechura's (1980) paper, borrowed the Queensland Museum material and noted sufficient diagnostic differences to place (Sprackland, 1991a, p. 570, figs. 6, 7, tables 1, 2) the mainland lizards in a new species, *Varanus teriae*. The taxon was described as 'a predominantly melanistic lizard, with light bluish-green snout tip, yellow dorsal spots forming thin, paired chevrons and caudal rings, a pronounced temporal streak, and a pale yellowish ventor, readily distinguished by colour and pattern from all other tree monitors. It is further distinguished by the conical, not flat, gular scales, a more anterior nostril, and

by a more robust appearance, especially the postocular region'. The holotype (catalogue no. J31566 in the Queensland Museum) was from Buthen Buthen, Nesbit River, Cape York Peninsula, collected by Czechura in August 1978.

3. Since its publication, the specific name of *Varanus teriae* has been used in various works, most of which have been cited in *Zoological Record*. These include Covacevich & Couper (1991), Sprackland (1991b, 1992, 1993a, 1993b, 1994, 1995), Cogger (1992), Cogger, Cameron, Sadlier & Eggler (1993), Covacevich & McDonald (1993), Whittier & Moeller (1993), Bennett (1995), Card & Kluge (1995), Frank & Ramus (1995), van Kalken (1995), De Lisle (1996), Steel (1966) and Welsch (in press). To our knowledge the name has been used by at least 19 authors in 18 publications. The lizard features in documentation relating to conservation of protected species, some of which is cited above, and is listed under the name *Varanus teriae* in the *World checklist of threatened amphibians and reptiles* (1993, p. 50) and in the most recent publication (1996) issued by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

4. During the period 1982–1991 extensive literature review by Sprackland and consultation with several colleagues also working on varanids failed to find a valid name already in existence for *Varanus teriae*. In March 1995 Sprackland became aware of the possibility that, in addition to the (1984) serial publication by Wells & Wellington, new varanid names might exist in a second privately published revision of Australian herpetofauna (Wells & Wellington, 1985a). Despite searches in major libraries in the U.K., Europe and the U.S.A. it was not possible to obtain a copy of the latter and Sprackland located it only at the office of the Commission Secretariat in London. Requests for a copy from the original authors went unanswered (although a cheque for payment was cashed by the 'Australian Herpetologists' League'). In the 1985a publication by Wells & Wellington, Czechura's lizards from mainland Australia were given (p. 21) the name *Odatria keithhornei*. The authors noted that the species was 'a member of the *Odatria prasinus* complex, believed confined to Cape York Peninsula, Queensland and readily identified by referring to the excellent diagnostic and descriptive data in Czechura (1980)', and the name *keithhornei* was made available under Article 13a(ii) of the Code. The holotype was specimen no. J31566 in the Queensland Museum and *keithhornei* is thus a senior objective synonym of *teriae*. *Odatria*, a genus proposed by Gray (1838, p. 394) and relegated to a subgenus by Mertens (1942) and subsequent authors, is a valid taxon within *Varanus* Merrem, 1820. However, work by Böhme (1988) and by Sprackland (1991b) has demonstrated that the *V. prasinus* group does not belong to *Odatria* but instead to the New Guinean subgenus *Euprepiosaurus* Fitzinger, 1843.

5. In 1985 King & Miller (pp. 4–5) published a review of Wells & Wellington's first (1984) paper. They considered that the publication had been inadequately researched and that the wholesale alterations to existing classification and nomenclature were likely to cause destabilisation and confusion. They noted that the Australian Society of Herpetologists had unaminously adopted a resolution to request the Commission to suppress the work. The instability which would result from acceptance of this work and two further herpetological publications by Wells & Wellington (1985a, 1985b) generated a number of comments (see, for example, Heatwole, 1985, p. 6; Gans, 1985, pp. 6–7; Tyler, 1985, p. 69; Grigg & Shine, 1985, pp. 96–97; Thulborn, 1986, pp. 13–14; and Heatwole & Taylor, 1987, p. 262). An application by the President of

the Australian Society of Herpetologists was published in June 1987 (BZN **44**: 116–121) seeking the suppression for nomenclatural purposes of the three works by Wells & Wellington (1984, 1985a and 1985b). Publication of the application was followed by many comments, some of which were published in BZN **44**: 257–261; **45**: 52–54, 145–153, 216; and **47**: 139–140. The Commission considered the case at its meeting in Amsterdam in September 1991 and decided (see the report in BZN **48**: 337–338; December 1991) that suppression of the three publications would be ineffective in eliminating confusion but that it would deal with individual nomenclatural problems generated by the works as and when a need arose.

6. In the years since its publication the specific name of *Varanus teriae* Sprackland, 1991 has consistently been used for the mainland species of tree monitor, and the species appears under this name in legal documentation relating to its conservation and management. Recognition of the entirely rarely used *keithhornei* as valid for the taxon, and substitution of this name for *teriae*, would cause considerable confusion. We therefore propose that the specific name of *Odatria keithhornei* Wells & Wellington, 1985 be suppressed.

7. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the specific name *keithhornei* Wells & Wellington, 1985, as published in the binomen *Odatria keithhornei*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Specific Names in Zoology the name *teriae* Sprackland, 1991, as published in the binomen *Varanus teriae*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *keithhornei* Wells & Wellington, 1985, as published in the binomen *Odatria keithhornei* and as suppressed in (1) above.

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Comments on the proposed conservation of the names *Geopeltis* Regteren Altena, 1949, *Geoteuthis* Münster, 1843, *Jeletzkyteuthis* Doyle, 1990, *Loligosepia* Quenstedt, 1839, *Parabelopeltis* Naef, 1921, *Paraplesioteuthis* Naef, 1921 and *Belemnoteuthis montefiorei* Buckman, 1880 (Mollusca, Coleoidea)
(Case 2987; see BZN **53**: 253–260)

(1) Peter Doyle

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I write in support of the application by Engeser & Donovan to suppress the nominal genus *Belemnosepia* Buckland & Agassiz, 1836 in order to conserve the usage of the fossil coleoid names *Geopeltis*, *Geoteuthis*, *Jeletzkyteuthis*, *Loligosepia*, *Parabelopeltis* and *Paraplesioteuthis*. I agree wholeheartedly with this course of action as the continued availability of the earlier name *Belemnosepia* destabilises the above widely used generic names. Engeser & Donovan have put the case succinctly and persuasively, and their proposals should be accepted.

I also agree with their proposal to conserve the name *montefiorei* published in the binomen *Belemnoteuthis montefiorei*. The older name *Orthoceras belemnitoeides* has not, to my knowledge, been widely applied in the coleoid literature and is effectively a nomen oblitum. The species name *montefiorei*, on the other hand, is widely used and continues to be a valuable descriptor of a probable phragmoteuthid from the Lower Jurassic of northern Europe.

(2) R.A. Hewitt

12 Fairfield Road, Eastwood, Leigh-on-Sea, Essex SS9 5SB, U.K.

I write to support the case made by Engeser & Donovan for the suppression of *Belemnosepia* and *Orthoceras belemnitoeides*. The former name was unknown to me, and between 1980 and 1983 I wrote three papers citing *Loligosepia* from Lyme Regis. Moreover, the name *Belemnosepia* is easily confused with *Belosaepia* and is unrelated to belemnites and to *Sepia*. Voltz (1840) listed various species and illustrations from Buckland (1826b) when describing his new genus *Belopeltis* from Lyme and Ohmden, but made no reference to plate 44 or to *Belemnosepia*. Thus Voltz, like Buckland but unlike d'Orbigny (1846), did not confuse the Lyme phragmoteuthids with the *Loligosepia-Geopeltis* group.

Comment on the proposed designation of *Atrypa laevis* Vanuxem, 1842 as the type species of *Meristella* Hall, 1859 (Brachiopoda)
(Case 3003; see BZN **53**: 182–183; **54**: 50–51)

Sandra J. Carlson

Department of Geology, University of California, Davis, California 95616, U.S.A.

I write in support of the proposal by Fernando Alvarez to designate *Atrypa laevis* Vanuxem, 1842 as the type species of *Meristella* Hall, 1859. The argument put forward is sound and merits the action proposed.

Comments on the proposed designation of *Spirifer multistriatus* Hall, 1857 as the type species of *Trematospira* Hall, 1859 (Brachiopoda)
(Case 3007; see BZN **53**: 264–266)

(1) Arthur J. Boucot

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I write in strong support of Alvarez's application. As Alvarez points out, I and my colleagues used *Spirifer multistriatus* as the type species in the first edition of the Brachiopoda volume of the *Treatise on Invertebrate Paleontology*; many others have done so since. To switch things back to the position unintentionally set up by Davidson would confuse things for all of us. Alvarez very effectively sets out the problem and makes it clear that Davidson was not really involved with the understanding of this endemic, North American brachiopod, but included it in his monograph for the sake of completeness; I doubt if he had specimens in London available for study. This being the case, it makes good sense to me, as one of the taxonomists who has actually studied the genus, that we should follow Hall's obvious intentions based on his knowledge of the shells involved.

(2) Sandra J. Carlson

Department of Geology, University of California, Davis, California 95616, U.S.A.

I write in support of the proposal by Fernando Alvarez to designate *Spirifer multistriatus* Hall, 1857 as the type species of *Trematospira* Hall, 1859. The argument put forward is sound and merits the action proposed.

(3) C.H.C. Brunton

Palaeontology Department, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

I consider Alvarez's application as soundly based and valuable.

Comment on the proposed precedence of *Metaphycus* Mercet, 1917 over *Aenasioidea* Girault, 1911 (Insecta, Hymenoptera)
(Case 2975; see BZN **52**: 313–315)

Zdenek Bouček

Department of Entomology, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

John LaSalle & Andrew Polaszek

International Institute of Entomology, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

We wish to express our strong support for the application to conserve the generic name *Metaphycus* Mercet, 1917 in favour of *Aenasioidea* Girault, 1911. As the

authors of the application have correctly pointed out, the name *Metaphycus* is widely known and has been cited hundreds of times in the literature, and the genus currently contains over 220 species. It is well known to applied workers as it contains many species of economic importance and has been widely cited in the biological control literature. The name *Aenasioidea*, on the other hand, is virtually unknown.

This is a clear case of usage versus priority. One important aspect in our view is that the authors of the application have acted correctly at every step. They identified that the problem existed (Noyes & Woolley, 1994) and acted according to the Code in continuing to use *Metaphycus* as the valid name pending a decision by the Commission, thus preventing the opportunity for the older name to gain usage. And, finally, they presented an application to the Commission in a timely fashion, resulting in only a year between the time of publication of the original paper and the publication of their application.

Given the facts that the name *Metaphycus* is widely known to both systematists and applied workers, that the name *Aenasioidea* is virtually unknown to both groups, and that the case was handled properly and presented in a short time, we have no hesitation in offering our strong support for this application.

Comments on the proposed conservation of the names *Labrus* Linnaeus, 1758, *Cichlasoma* Swainson, 1839 and *Polycentrus* Müller & Troschel, 1848 by the designation of neotypes for *Labrus bimaculatus* Linnaeus, 1758 and *L. punctatus* Linnaeus, 1758 (Osteichthyes, Perciformes)
(Cases 2880 and 2905; see BZN **50**: 215–218 and **53**: 106–111)

(1) Reeve M. Bailey

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It is apparent from the presentations of Cases 2880 (BZN **50**: 215–218; September 1993) and 2905 (BZN **53**: 106–111; June 1996) that application of the Code would result in unfortunate name changes for certain fishes in the families CICHLIDAE, LABRIDAE and NANDIDAE unless the Commission exercises its plenary powers to retain widespread usage. With the proposers, I wholeheartedly support such action and approve overriding the Code to achieve stability in nomenclature. However, my preferred solutions to the problems differ from those proposed by Dr R. Fricke and Dr C.J. Ferraris in Case 2905.

Case 2880 by Dr H.-J. Paepke recommends suppression of the specific name of *Labrus punctatus* Linnaeus, 1758 and, with the other proposals of para. 8 on BZN **50**: 216–217, this would assure continuity of the use of *Polycentrus schomburgkii* Müller & Troschel, 1848. I approve these moves. Application of the name *punctatus* for either the South American nandid as suggested by Kullander (1983, p. 84) or for the American cichlid well known as *Cichlasoma bimaculatum* as proposed by Fricke & Ferraris (Case 2905, para. 8) would unnecessarily bring an unused specific name into use for a familiar species and is thus objectionable.

Case 2905 points out the unfortunate circumstance that *Labrus bimaculatus* Linnaeus, 1758 has been regarded as the type species of both *Cichlasoma* (CICHLIDAE)

and *Labrus* (LABRIDAE). The authors properly deplore the consequences. Solutions to the problem should certainly not generate changes in the family group names CICHLIDAE or LABRIDAE, nor need they.

Fricke & Ferraris advocate (para. 9(2) on BZN **53**: 109) placement of (a) *Labrus* Linnaeus, 1758; (b) *Cichlasoma* Swainson, 1839; and (c) *Polycentrus* Müller & Troschel, 1848 on the Official List. I concur, but differ as to the type species to be designated for *Labrus* and *Cichlasoma*, as I discuss below.

Labrus mixtus Linnaeus, 1758 from 'Liburni' (the Adriatic coast of the former Yugoslavia) and *L. bimaculatus* Linnaeus, 1758 from 'M. Mediterraneo' (likely an error; see comment by Fernholm & Wheeler, 1983, cited by Fricke & Ferraris, para. 4 of their application) have the same authorship and date. Both names have at times been associated with the 'cuckoo wrasse', a common labrid fish of the Mediterranean and eastern Atlantic (see Wheeler, 1969, pp. 368–369; Bauchot & Quignard, 1973, pp. 426–427). Fricke & Ferraris (para. 7) proposed that the name *L. bimaculatus* be maintained in the LABRIDAE by designation of a neotype. They contend that most authors continue to use the name. On the other hand, Wheeler (1969, p. 368) wrote: 'There is little justification, other than that of page priority, in using either the name *Labrus ossifagus* [another Linnaean synonym] or *L. bimaculatus* Linnaeus, 1758, for this fish. Indeed, those names had been considerd and rejected by numerous authors in the nineteenth century. *L. mixtus* has received far wider usage than any of the numerous synonyms available for the species'. In their extensive synonymy of the cuckoo wrasse, Bauchot & Quignard (1973, p. 426) cite 15 references that used *L. bimaculatus* (six before and nine after 1950); for *L. mixtus* they cite 35 references (29 before and six after 1950).

There is no doubt that *Labrus mixtus* as described by Linnaeus (1758) applies to the cuckoo wrasse. However, the brief description of *L. bimaculatus* Linnaeus fits the widespread South American cichlid currently assigned that name. Dr Sven Kullander, a student of the South American CICHLIDAE, wrote (1983, p. 83): 'How this fish [cuckoo wrasse] can be identified as the Linnaean species [*Labrus bimaculatus*] I simply do not understand. Page priority seems to be the reason for using the name *L. bimaculatus* as a senior synonym of *L. mixtus* ...'. The South American cichlid currently known as *Cichlasoma bimaculatum* (Linnaeus) has a lateral dark blotch and another at the caudal fin base, as recorded by Linnaeus, hence '*bimaculatus*'. Females and juveniles of the cuckoo wrasse (*Labrus mixtus*) have three prominent dark spots posteriorly on the dorsal surface (Wheeler, 1969, p. 368) (males lack these spots). If Linnaeus were describing a cuckoo wrasse instead of the South American cichlid he would assuredly have called it *trimaculatus*, not *bimaculatus*! Linnaeus also gave the anal fin-ray formula 4/12 [= four spines and eight soft rays], appropriate for northern populations of the black acara (*Cichlasoma bimaculatum*) but not for the cuckoo wrasse, which consistently has three anal spines. In view of this, it is incongruous that Fricke & Ferraris propose the application of the name *Labrus bimaculatus* Linnaeus, 1758 as the type species of *Labrus* Linnaeus, 1758. If *L. mixtus* Linnaeus is designated as the type species the stability of *Labrus* is assured, and its type species is properly aligned with the LABRIDAE.

As indicated by Fricke & Ferraris (para. 6 of their application), *Labrus bimaculatus* has been incorrectly cited as the type species of *Cichlasoma* by Eigenmann (1912), Kullander (1983), Eschmeyer & Bailey (1990), and others. The type species by

monotypy is *Labrus punctata* [sic] 'Bloch, 1792' (see Bailey, 1957, p. 303). The name *Labrus punctatus* as used by Bloch (1792, p. 26 and pl. 295, fig. 1) refers to the cichlid fish known to contemporary authors as the black acara, *Cichlasoma bimaculatum* (Linnaeus, 1758). Bloch's figure and description are unmistakable. The logical choice for the type species of *Cichlasoma* is *Labrus bimaculatus*, the fish actually described by Bloch and selected by Swainson (1839) to typify *Cichlasoma*. This would preserve current nomenclature for the cichlid *Cichlasoma bimaculatum* and eliminate restoration of the unused *L. punctatus*.

Fricke & Ferraris (para. 6) comment on the restriction by Kullander (1983, pp. 65–89, pls. 1 and 2) of *C. bimaculatum* to a form distributed only from Guiana to Venezuela. The *bimaculatum* 'complex', usually regarded as including one or two species, ranges widely in South America (Kullander, 1983, p. 284) and was treated by Kullander as an array of 12 allopatric species, of which he described eight as new. Kullander wrote (p. 281): 'The twelve species of *Cichlasoma* that I have distinguished differ very little from each other. They are so similar that without comparative material, locality data may be more important than characters in curatorial identification routines. Nevertheless, some groups of species may be distinguished, and it is clear that speciation has not been radiative but sequenced chronologically'. Kullander (1983, pp. 10, 263) correctly indicated that *Aequidens portalegrensis* (Hensel, 1870), characterized by three, rarely four, anal spines, and *Cichlasoma bimaculatum*, with two to six, usually four, anal spines, are congeneric. In the preamble to his key (p. 282) Kullander said: 'Anal-fin spine number is the leading character; although known to vary in most species, aberrant specimens are, however, rare'. In the primary dichotomy Kullander includes six 'species' from the Paraná basin and southern tributaries to the Amazon that modally have three anal spines; the other six nominal 'species', including *bimaculatum*, occur in the Amazon River, northern South America, and eastern Brazil; they modally have four anal spines. A geographic difference in anal spine count is unquestioned, but it seems overvalued. *C. boliviense* from the Madeira basin, characterized by Kullander as a three-spined 'species', has in 52 counts by me 12 (23%) with four anal spines, including all eight specimens in a series from the Rio Guaporé (the type locality). These might be identified as intergrades. I prefer to regard the 12 nominal forms as one species, a complex of two, or possibly more, subspecies under the name *Cichlasoma bimaculatum*.

It should be noted that *C. bimaculatum* is introduced and spreading actively in Florida. That stock typically has four anal spines and was presumably an aquarium importation from northern South America (see Hensley & Courtenay, 1980, p. 764).

The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:

(a) to approve the proposals in para. 8 of Case 2880 (BZN **50**: 216–217), thus conserving the customary use of the name *Polycentrus schomburgkii* Müller & Troschel, 1848;

(b) to set aside all previous fixations of type species for the following nominal genera:

(i) *Labrus* Linnaeus, 1758 and to designate *Labrus mixtus* Linnaeus, 1758 as the type species;

(ii) *Cichlasoma* Swainson, 1839 and to designate *Labrus bimaculatus* Linnaeus, 1758 as the type species;

(2) to place on the Official List of Generic Names in Zoology the following names:
(a) *Labrus* Linnaeus, 1758 (gender: masculine), type species by designation in (1)(b)(i) above *Labrus mixtus* Linnaeus, 1758;
(b) *Cichlasoma* Swainson, 1839 (gender: neuter), type species by designation in (1)(b)(ii) above *Labrus bimaculatus* Linnaeus, 1758;

(3) to place on the Official List of Specific Names in Zoology the following names:
(a) *mixtus* Linnaeus, 1758, as published in the binomen *Labrus mixtus* (specific name of the type species of *Labrus* Linnaeus, 1758);
(b) *bimaculatus* Linnaeus, 1758, as published in the binomen *Labrus bimaculatus* (specific name of the type species of *Cichlasoma* Swainson, 1839).

Additional references

Bailey, R.M. 1957. *Cichlaurus* versus *Cichlasoma* as the name for a genus of perciform fishes. *Copeia*, **1957**(4): 303–304.

Hensley, D.A. & Courtenay, W.R. 1980. *Cichlasoma bimaculatum* (Linnaeus), black acara. P. 764 *in* Lee, D.S. et al., *Atlas of North American freshwater fishes*. x, 854 pp. North Carolina State Museum of Natural History, Raleigh.

(2) Sven O. Kullander

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Linnaeus (1758) established the genus *Labrus* for a group of 40 species of spiny-rayed fish. Included were *Labrus bimaculatus* (p. 285) and *L. punctatus* (p. 285) based on his own descriptions of 'Sciaena bimaculata' (Linnaeus, 1754, p. 66, pl. 31, fig. 6) and 'Sciaena punctata' (Linnaeus, 1754, p. 66, pl. 31, fig. 5), *L. ossifagus* (p. 286) described from a specimen in Linnaeus's own possession, and *L. mixtus* (p. 287) based on a species in Artedi (1738). To the description of *punctatus* Linnaeus added a reference to Gronovius's (1754, p. 36) description of 'Labrus bruneus, ossiculo ...', which was also figured by Gronovius (1756, pl. 5, fig. 4).

Revisions of the Linnaean fish collections (Fernholm & Wheeler, 1983; Wheeler, 1985, 1991) have clarified the status and identifications of the types of *L. bimaculatus*, *L. punctatus* and *L. ossifagus*, and demonstrated that no type material of *L. mixtus* is preserved. I (Kullander, 1983, p. 84) designated the sole surviving specimen (catalogue no. NRM 43; now recatalogued as NRM 4) as the lectotype of *L. punctatus*. It had already been identified by Smitt (1892, p. 11) as a specimen of the species described by Müller & Troschel (1849a, 1849b) as *Polycentrus schomburgkii* (para. 4 of Case 2880).

The problem, set out by Fricke & Ferraris in their application (Case 2905) but already noted by myself (Kullander, 1983), is that:

(1) The holotype of *Labrus bimaculatus* represents a species of the family CICHLIDAE, usually referred to as *Cichlasoma bimaculatum*, but the name has also occasionally been used for a species of the family LABRIDAE, well known otherwise as *L. mixtus*.

(2) The nominal species *L. bimaculatus* has been considered as the type species of both *Cichlasoma* Swainson, 1839 (CICHLIDAE) and *Labrus* Linnaeus, 1758 (LABRIDAE).

(3) The lectotype of *L. punctatus* represents a species of the family NANDIDAE (or POLYCENTRIDAE) and possibly the same as *Polycentrus schomburgkii* Müller & Troschel, 1849, a name preferred by H.-J. Paepke in an application to the Commission (Case 2880; BZN **50**: 215–218).

(4) *L. punctatus* has been considered as the type species of both *Polycentrus* Müller & Troschel, 1849 and *Cichlasoma*.

Fricke & Ferraris's application (Case 2905) makes a number of assertions and proposals to which I cannot agree. Their proposals constitute an alternative rather than the most parsimonious approach to stability. Instead I would like to make a clear case for the conservation of existing usage and type specimens. Paepke's related application (Case 2880) requires simultaneous consideration. Paepke requested the Commission to give the name *Polycentrus schomburgkii* priority over *L. punctatus*, arguing that *schomburgkii* is a better known name.

In designating (Kullander, 1983) a lectotype for *L. punctatus* it seemed appropriate to me (see above) to select the single remaining specimen, which Linnaeus (1754) figured and described in some detail. Other nominal species included in *Polycentrus* are *P. schomburgkii* Müller & Troschel, 1849 from Guyana, *P. tricolor* Gill, 1858 from Trinidad, and *Mesonauta surinamensis* Sauvage, 1882 from Surinam. Both Fernholm & Wheeler (1983, p. 253) and Paepke (BZN **50**: 216, para. 5) considered the poor quality of Linnaeus's (1754) figure of *punctatus* to have prevented its true identification as a nandid. In fact the figure is quite good, showing well the shape and colour pattern of a *Polycentrus* species. I suggest that poor familiarity with *Polycentrus* may have misled Fernholm & Wheeler, and that post-Linnaean authors examining the plate (Linnaeus, 1754, pl. 31) simply missed looking at *L. punctatus* (fig. 5) because of the much more obvious *L. bimaculatus* (fig. 6). Other contributing factors may well have been the limited availability of Linnaeus's (1754) work so that authors followed published statements rather than make their own examination, and the reluctance of taxonomists to restudy Linnaean type material.

I do not agree with the assertion by Paepke (Case 2880) and by Fricke & Ferraris (BZN **53**: 107, para. 5) that *schomburgkii* is a well known name meriting protection. Paepke (BZN **53**: 215, para. 4, and 216, para. 7) gives the impression that the taxonomy of *Polycentrus* (with four nominal species so far) has been critically examined. However, no such analysis has ever been made; *Polycentrus* has never been revised at species level and the types of *punctatus*, *schomburgkii* and remaining nominal species have never been compared. The species figure mainly in aquarium and behaviour literature (note the references cited by Paepke, BZN **50**: 216, para. 5). Eigenmann & Eigenmann (1891, p. 66) listed *P. tricolor* and *P. schomburgkii* as valid but the names were synonymized without comment by Regan (1906) and *tricolor* has hardly been used since. *Mesonauta surinamensis* was synonymized with *schomburgkii* by Pellegrin (1904, p. 221). However, several recent studies of Guianan fishes (see, for example, Kullander & Nijssen, 1989) show that there is considerable diversity, with closely related species replacing each other in parallel river drainages. In my view any decision as to relative priorities of *P. schomburgkii* and *L. punctatus* should be left to

a systematic revision evaluating their status. With current information, *P. schomburgkii*, *L. punctatus*, *M. surinamensis* and *P. tricolor* are all potentially valid species.

The date of publication of vol. 3 of Schomburgk's *Reisen in Britisch-Guiana*, in which Müller & Troschel published the section on fish and included the new taxon *Polycentrus schomburgkii*, is commonly cited as 1848, as given on the title page. However, Whitehead (1973, pp. 6, 214), referring to *Börsenblatt für den deutsche Buchhandel*, No. 21, gives the publication date as 13 March 1849. Part 3 of Müller & Troschel's *Horae Ichthyologicae* was also published in 1849, but no more precise information is known. The description of *Polycentrus* and *P. schomburgkii* could have priority in either publication but for the sake of continuity I suggest that Schomburgk's work continue to be cited as the earlier.

With regard to the cichlid *Cichlasoma* (BZN **53**: 107, para. 3), Fricke & Ferraris should consider that the combination *Cichlasoma bimaculatum* is very widely used and that *bimaculatus* is the long accepted type species of *Cichlasoma*. In establishing *Cichlasoma*, Swainson (1839) referred exclusively to the figure (pl. 295, fig. 1) published by Bloch (1792). The figure is captioned '*Labrus punctata*' but clearly shows a cichlid fish, identified by Kullander (1983) and most other authors as *Cichlasoma bimaculatum* (Linnaeus). Gill (1858) was the first author to use Swainson's cichlid names and he referred to '*Labrus punctatus* Bloch' as the type species of *Cichlasoma*. Under Article 68d of the Code *L. punctatus* is the type species by monotypy of *Cichlasoma* and, through my (Kullander, 1983) lectotype designation, *Cichlasoma* Swainson, 1839 is a senior subjective synonym of *Polycentrus* Müller & Troschel, 1849. However, '*Labrus punctatus*' as used by Bloch is clearly a misidentification of *Labrus punctatus* Linnaeus, 1758 and Article 70b applies. I now propose that the Commission use its plenary powers to select the species actually involved, *Labrus bimaculatus*, as the type species of *Cichlasoma*.

Fricke & Ferraris (BZN **53**: 108, para. 9) assert that the name *Cichlasoma bimaculatum* (CICHLIDAE) is little used compared with the combination *Labrus bimaculatus* (LABRIDAE). This is not so. *Cichlasoma* used to be one of the most species-rich cichlid genera and, although now applied to 12 South American species, the name is retained in some form for almost a hundred species in Central America pending revision (see Kullander, 1983). The name *Cichlasoma bimaculatum* is widely cited in current literature, and unlike the combination *Labrus bimaculatus* which has always co-existed with *Labrus mixtus* and *L. ossifagus* (see below), it has been one of the most stable names in Neotropical ichthyology since Gill's (1858) and, particularly, Pellegrin's (1904) and Regan's (1905) revisions. To adopt *punctatus* as the cichlid species name in place of *bimaculatum* would severely upset stability and be contrary to long accepted usage.

The European 'cuckoo wrasse' has an impressive synonymy but three names in particular, all proposed by Linnaeus (1758), have been commonly associated with the species (see Wheeler, 1992, p. 21). Southern European authors (Quignard & Pras, 1986, p. 927, for example) currently mostly prefer the name *Labrus bimaculatus* whereas Danish, Norwegian, Swedish, German, British and Chinese authors use either *L. mixtus* (see, for example, Sundström, 1877, p. 243; Stuxberg, 1894, p. 347; Otterstrøm, 1912, p. 131; Rauther, 1921, p. 98; Mohr, 1927, p. XII.h 87 (*L. ossifagus* in synonymy); Nybelin, 1942, p. 65; Norman, 1947, p. 299; Rosén, Lindroth & Svensson, 1955, plate opposite p. 32 (but *L. ossifagus*, *L.* '*ossifragus*' and *L. mixtus*

listed in text entry, p. 43); Wheeler, 1969, p. 368; 1978, p. 276; 1991, p. 179; 1992, p. 21; Terofal, 1981, p. 106; Yang, 1982, p. 639; Hilldén, 1984; Härkönen, 1986, p. 176; and further references in this comment) or *L. ossifagus* (often spelt '*ossifragus*') (see, for example Lönnberg & Gustafson, 1936; Nybelin, 1937, p. 17; Ursing, 1956, p. 130; Hanström & Johnels, 1962, p. 449; Curry-Lindahl, 1975, p. 173; Muus & Dahlström; 1977, p. 128; and other references herein). The several other synonyms have rarely been used after their first publication (see Bauchot & Quignard, 1973, p. 426).

Labrus was revised and the status of *Labrus mixtus* was discussed at some length by Valenciennes (in Cuvier & Valenciennes, 1839, pp. 46–58 especially) who included *L. ossifagus* in the synonymy of *L. mixtus* but did not mention *L. bimaculatus*. Valenciennes suggested the synonymy on the basis of fin counts, and although he noted the similarity in dorsal fin count, he considered the primary (female) phase to be a distinct species, *L. trimaculatus* Gmelin, 1789. Krøyer (1838–1840, pp. 498–520, especially pp. 511 and 520) included *L. ossifagus* in *L. mixtus*, tentatively (p. 511) and with reference to Valenciennes (p. 512). There was no mention of *L. bimaculatus*. Sundevall (1842, p. 160), used the name *L. mixtus* for the cuckoo wrasse; *L. ossifagus* was mentioned with reference to Valenciennes's synonymisation with *L. mixtus*, and there was no mention of *L. bimaculatus*.

Monographers of the Scandinavian fish fauna, Nilsson (1855, p. 265) and Lilljeborg (1884, p. 429) used *L. mixtus* and did not mention *L. ossifagus* or *L. bimaculatus*. Günther (1862, p. 74) used *L. mixtus*, listing *L. ossiphagus* (sic) and *L. bimaculatus* as synonyms. He also (p. 276) listed *L. bimaculatus* as *Acara bimaculata* in the CICHLIDAE. Smitt (1892, p. 10) reviewed the status of the various names applied to the cuckoo wrasse; he followed Valenciennes in selecting *L. mixtus* over *L. ossifagus*, clearly explained that the specimen of *L. punctatus* studied by Linnaeus (1754, 1758) and preserved in the Swedish Museum of Natural History, Stockholm, belongs to the species described as *P. schomburgkii* by Müller & Troschel (1849a, 1849b), and that the holotype of *L. bimaculatus* is a cichlid. Lönnberg (1896, p. 42) adopted *L. ossifagus* as a senior synonym of *L. mixtus* under the erroneous assumption that *L. mixtus* was first described by Fries & Ekström (1836–1857). After reading Thunberg (1787, p. 23), Lönnberg changed the name to *ossifragus*, considering *ossifagus* to be a lapse, and subsequent to 1896 *L. ossifagus* and *L. ossifragus* were commonly used in Swedish literature. It is plain that *L. ossifagus* was universally considered a junior synonym of *L. mixtus* from 1839 to 1896, and that subsequent use of *ossifagus* has been limited (see Wheeler, 1992, p. 21).

It seems likely that the misidentification of *Labrus bimaculatus* as the European cuckoo wrasse stems from Linnaeus's (1758) erroneous type locality (Mediterranean Sea) and Gmelin's (1789, p. 1289) insertion of a reference to Pennant (1769, p. 205) which extended the fish's range to the British Isles and conveyed a European status on the species. Linnaeus's (1754, 1758) descriptions of *bimaculatus*, and the specimen described and figured by Linnaeus (1754, p. 66, pl. 31, fig. 6; now catalogued as NRM 7 and previously as NRM 42), do not give any reason to identify the taxon as any known European labrid, and it has been firmly included in the CICHLIDAE since Günther (1862). It is clear that Quignard (1966) was in error in citing *L. bimaculatus* as included in *Labrus* and that this has been uncritically followed by some later authors. In Fricke & Ferraris's application (para. 1) Jordan (1891) is considered to have provided the first valid type species designation for *Labrus*. In Jordan's revision

of the European and American LABRIDAE, nomenclatural decisions include reference to page priority, and consequently (p. 611) *Labrus bimaculatus* (described on p. 285 in Linnaeus, 1758) is chosen as the senior synonym of *L. ossifagus* (p. 286) and *L. mixtus* (p. 287): 'We follow Günther [1862], Day [1880–1884], and Steindachner [1868] in regarding the species called *carneus* and *bimaculatus* as the female of *Labrus mixtus*. The name *bimaculatus* stands first in the *Systema Naturae*, for which reason we have adopted it, although it is by no means an appropriate one'. Thus, *Labrus bimaculatus* appears as the type species of *Labrus* in Jordan (1891).

In my view stability is best attained by simply recognising *Labrus mixtus* Linnaeus, 1758 as the type species of *Labrus* Linnaeus, 1758. *Labrus mixtus* was based on Artedi's (1738, p. 34 (Genera) and p. 57 (Synonymia)) 'Labrus ex flavo & coeruleo varius, dentibus anterioribus majoribus', in turn based on Willughby's (1686, p. 322) 'Turdus major varius præcedenti similis'. No original type material of *L. mixtus* is known to exist. The holotype of *L. ossifagus* is preserved in the collection of the Uppsala University Zoological Museum (catalogue number UUZM 193). The specimen was listed by Thunberg (1787, p. 23) and in manuscripts listed by Wheeler (1991, p. 179), and recognized as Linnaean type material by Lönnberg (1896), who identified it as being the same species as *L. mixtus*. Wheeler (1991, fig. 18) figured the specimen and confirmed this identification. This specimen represents the cuckoo wrasse as currently and universally understood. It is most suitable as the neotype of *L. mixtus* and I now designate it as such. This designation, together with Valencienne's (1839) first reviser selection of *L. mixtus* as the valid name, renders the latter a senior objective synonym of *L. ossifagus*.

Fricke & Ferraris say (BZN **53**: 108, para. 7) that if their application is not approved the family group name CICHLIDAE will need to be replaced since it will be a junior synonym of LABRIDAE following the transfer of the name *Labrus* to the genus now known as *Cichlasoma*. My proposals below will accomplish the necessary protection of the name CICHLIDAE. It may also be pointed out that the name PHARYNGODOPILIDAE Cocchi, 1864 is not a synonym of CICHLIDAE as Fricke and Ferraris have indicated. The PHARYNGODOPILIDAE were recognized for fossil pharyngeal tooth plates. In having teeth positioned across the median portion of the lower pharyngeal tooth plate, which characterizes the families EMBIOTOCIDAE, LABRIDAE and POMACENTRIDAE but not the CICHLIDAE (see Stiassny & Jensen, 1987, p. 288), the genus *Pharyngodopilus* Cocchi, 1864 is not a cichlid.

The International Commission on Zoological Nomenclature is accordingly asked:

(1) to set aside the proposals in Cases 2880 and 2905;

(2) to use its plenary power to set aside all previous fixations of type species for the following nominal genera:
   (a) *Labrus* Linnaeus, 1758 and to designate *Labrus mixtus* Linnaeus, 1758 as the type species;
   (b) *Cichlasoma* Swainson, 1839 and to designate *Labrus bimaculatus* Linnaeus, 1758 as the type species;

(3) to place on the Official List of Generic Names in Zoology the following names:
   (a) *Labrus* Linnaeus, 1758 (gender: masculine), type species by designation in (2)(a) above *Labrus mixtus* Linnaeus, 1758;
   (b) *Cichlasoma* Swainson, 1839 (gender: neuter), type species by designation in (2)(b) above *Labrus bimaculatus* Linnaeus, 1758;

(4) to place on the Official List of Specific Names in Zoology the following names:
   (a) *bimaculatus* Linnaeus, 1758, as published in the binomen *Labrus bimaculatus* and as defined by the holotype (catalogue no. NRM 7 in the Swedish Museum of Natural History, Stockholm) (specific name of the type species of *Cichlasoma* swainson, 1839);
   (b) *mixtus* Linnaeus, 1758, as published in the binomen *Labrus mixtus* and as defined by the neotype (catalogue no. UUZM 193 in the Uppsala University Zoological Museum) designated above (specific name of the type species of *Labrus* Linnaeus, 1758);
   (c) *punctatus* Linnaeus, 1758, as published in the binomen *Labrus punctatus* and as defined by the lectotype (catalogue no. NRM 4 in the Swedish Museum of Natural History, Stockholm) designated by Kullander (1983);

(5) to place on the Official List of Rejected and Invalid Specific Names in Zoology the following names:
   (a) *ossifagus* Linnaeus, 1758, as published in the binomen *Labrus ossifagus* (a junior objective synonym of *Labrus mixtus* Linnaeus, 1758);
   (b) *ossifragus* Lönnberg, 1896, as published in the binomen *Labrus ossifragus* (a junior objective synonym of *Labrus ossifagus* Linnaeus, 1758).

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Comment on the proposed conservation of the specific name of *Hemidactylus garnotii* Duméril & Bibron, 1836 (Reptilia, Squamata)
(Case 2960; see BZN **53**: 184–186; **54**: 51–52)

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I write as a conservation-oriented herpetologist who has had some field encounters in Thailand with the species *Hemidactylus garnotii* Duméril & Bibron, 1836.

It is my pleasure to support the application made by Profs Smith, Kluge, Bauer and Chuszar to conserve the specific name of *Hemidactylus garnotii* in the face of the senior synonymy of *H. peruvianus* Wiegmann, 1835. My reasons for this are two-fold:

1. The name *H. garnotii* is well established and universally employed in publications dealing with the taxonomy of this species and its allies (see, for example, Smith, 1935; Taylor, 1963; Ota & Hikida, 1989; Ota, Hikida & Lue, 1989; Ota, Lau & Bogadek, 1995; Ota, Matsui, Chan-ard & Nabhitabhata, 1996). Few, if any, authors include *H. peruvianus* even as a tentative synonym. I could not find any reference to the latter in my Asia-dominated library.

2. The *Hemidactylus* taxon in question was originally a species of tropical eastern Asia, a region to which its close relatives remain restricted (see papers by Ota et al.). It has subsequently been introduced outside its natural range by human means, its establishment in new locales doubtless facilitated by its parthenogenetic reproduction. For an essentially Asian species to be named '*peruvianus*' may not be nomenclaturally incorrect but it is highly misleading; I hope that it will be kept in mind as an additional factor in favour of the suppression of *peruvianus* on grounds of stability.

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Comments on the proposed conservation of the specific names of *Holotropis herminieri* Duméril & Bibron, 1837 (currently *Leiocephalus herminieri*) and *Proctotretus bibronii* T. Bell, 1842 (currently *Liolaemus bibronii*) (Reptilia, Squamata)
(Case 2976; see BZN **53**: 112–115)

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1. It is my view that *Tropidolepis bellii* Gray, 1831 cannot be a synonym of *Proctotretus bibronii* Bell, 1842 (now *Liolaemus bibronii*); cf. para. 8 of the application. Gray's taxon was said to be 'metallic green'. Preserved and living individuals from the type locality of *L. bibronii* ('Port Desire' = Puerto Deseado, Santa Cruz Province, Argentina) and from throughout its range in the provinces of Chubut, Río Negro, Neuquén and Mendoza, are never green. Their color is always shades of tan and brown with cream-colored stripes (Cei, 1986). The length of *T. bellii* was said to be 10 inches (25.4 cm). The greatest total length (body + tail) of *L. bibronii* is 5.6 inches (14.2 cm). Additionally, *T. bellii* was said to have 'scales of the back ... strongly keeled, dagger pointed, the keels forming 14–16 ridges'. The number of rows of keeled dorsal scales in *L. bibronii* is 18–22.

2. The identity of *Tropidolepis bellii* Gray, 1831 cannot be determined with certainty. Relatively few species of *Liolaemus* have a color pattern that includes metallic green scales (Donoso-Barros, 1966). Of these, only *L. chiliensis* (Lesson, 1828) may attain a total length of 10 inches or more, i.e. 12.9 inches (32.7 cm) according to Hellmich (1934). Additionally, *L. chiliensis* is the only species with metallic green scales that has as few as 16 rows of keeled dorsal body scales (personal observation). Although it seems likely that *L. chiliensis* is a senior synonym of *Tropidolepis bellii* Gray, 1831, it would be best to consider the latter as a nomen dubium.

3. It is also my view that *Liolaemus bellii* Gray, 1845 (a species distinct from *Tropidolepis bellii* Gray, 1831) cannot be a synonym of *L. bibronii* (Bell, 1842); cf. para. 8 of the application. Although Boulenger (1885) listed *L. bellii* as a synonym of *bibronii*, it is likely to be a senior synonym of *Liolaemus altissimus altissimus* Müller & Hellmich, 1932 (p. 197), as suggested by Ortiz (1981) in an unpublished Ph.D. dissertation, and subsequently accepted in print by Laurent (1983, 1984a, 1992), Vanzolini (1986) and Etheridge (1995). According to the type description, *Liolaemus bellii* has keeled temporal scales (smooth in *L. bibronii*), a black head with yellow dots (light brown with irregular dark brown spots, often with light temporal stripes, in *L. bibronii*), and scales edged with yellow (not present in *L. bibronii*). All of these characters are, however, consistent with those of *L. altissimus altissimus*. This taxon occurs in the high cordilleras of Santiago Province, Chile. There are further subspecies of *Liolaemus altissimus*, the combined range of which is the high cordilleras of Chile and Argentina from about 32° to 42° south.

4. Müller & Hellmich (1933, pp. 121–134) considered *Proctotretus modestus* Philippi, 1860, with a type locality of 'der Wuste und in den Gebirgen der Provinz Santiago', to be a senior synonym of *L. altissimus altissimus* Müller & Hellmich,

1932. They rejected the use of *modestus* Philippi, however, because they thought it was a junior secondary homonym of *Liolaemus* (*Sauridus*) *modestus* Tschudi, 1845. Subsequently Laurent (1984b, p. 367) pointed out that Tschudi's taxon is actually a species of *Stenocercus* Duméril & Bibron, 1837, a genus in the TROPIDURIDAE distantly related to *Liolaemus*.

5. As noted in para. 3 above, following the appearance in 1981 of Ortiz's unpublished Ph.D. dissertation, the specific name of *Liolaemus bellii* Gray, 1845 has been adopted in place of *altissimus*. The validity of *L. bellii* has thus been established by acceptance of the synonymy of *L. bellii* and *L. altissimus* by authors subsequent to Ortiz, who have published the synonymy and who have adopted the earlier name. Nuñez & Jaksic (1992, p. 70), however, specifically rejected the use of *L. bellii* because Ortiz's thesis had not been published, an action also followed by Nuñez (1992). The rejection of *L. bellii* by these authors is a potential source of instability because it may be followed by others. It is therefore desirable that *L. bellii* Gray, 1845 be placed on the Official List as the name which is valid by both priority and majority usage, and this I now propose in addition to the proposals published in BZN **53**: 114.

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to place on the Official List of Specific Names in Zoology the name *bellii* Gray, 1845, as published in the binomen *Liolaemus bellii*.

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Neither of us is an expert in the taxonomy of South American lizards; in the taxonomic placement of *Tropidolepis bellii* Gray, 1831 we were merely following literature allocation. Inasmuch as Dr Etheridge is an expert in the field, we would not contest his allocation of the name (his comment above).

Our involvement in the names pertaining to this case is a product of accounting for all the species-group names proposed in or applicable to the genus *Sceloporus* Wiegmann, 1828, a project that we have been working on for several years. A number of such names were at one time proposed in the nominal genus *Tropidolepis* Cuvier, 1829, hence our concern with these (para. 1 of the application). Their proper allocation had to be established.

With regard to *Liolaemus bellii* Gray, 1845, although stability of nomenclature in the sense of established usage cannot be viewed as at stake, in another sense stability is involved: the proper interpretation of the fact that Ortiz's dissertation was not published. Nuñez & Jaksic (1992) regarded Ortiz's synonymizing of *altissimus* with *bellii* as invalid because it was never published. Nevertheless, as pointed out by Etheridge above, several authors in several works have accepted Ortiz's conclusion. It would help nomenclatural stability considerably if the Commission would make it clear that a decision on the proper name for the species concerned cannot hinge on the failure of Ortiz's dissertation to be published; his conclusion was published subsequently by others. We support the placement of the specific name of *Liolaemus bellii* Gray, 1845 on the Official List.

Comments on the proposed conservation of usage of 15 mammal specific names based on wild species which are antedated by or contemporary with those based on domestic animals

(Case 3010; see BZN **53**: 28–37, 125, 192–200, 286–288)

(1) Robin Pellew

World Wide Fund for Nature, WWF-UK, Panda House, Weyside Park, Catteshall Lane, Godalming, Surrey GU7 1XR, U.K.

I write as Director of WWF-UK.

I support the proposal to conserve the 15 mammal specific names for wild species which are cited in this application. Stability in the nomenclature is a prerequisite of

conservation and for this reason I urge that confirmation be given to the majority usage by adoption of the first available specific name based on a wild population for the 15 species.

(2) Elizabeth Cary Mungall

Department of Biology, Texas Woman's University, Denton, Texas 76204, U.S.A. (presently at *7926 South Lagoon Drive, Panama City Beach, Florida 32408–5306, U.S.A.*)

I support the application by Gentry, Clutton-Brock & Groves to conserve the usage of 15 mammal specific names based on wild species but antedated by, or contemporary with, names based on domestic animals assumed to be their derivatives. Among the advantages pointed out by the authors, this adoption of the first available specific name based on a wild population would confirm majority usage. Although most wild taxa and their domestic counterparts have the same scientific name (for example, *Oryctolagus cuniculus* (Linnaeus, 1758) for the wild and domestic rabbit, and *Columba livia* Gmelin, 1789 for the rock dove and domestic pigeon) a few, including these 15, traditionally do not.

Both stability in nomenclature and different scientific names for related wild and domestic forms are distinct advantages for investigators like myself who engage in ethological studies. Ethology is a comparative science. As works by leaders in this field, such as ungulate specialist Fritz R. Walther, illustrate (e.g. Walther, 1974, 1979, 1984), wild species and domestic forms are studied and discussed on equal terms. This promotes inspection of relationships in which domestication is not the central issue at the same time that it facilitates discussions on the process of domestication and its effects. Thus, Walther (1984) used wild American bison *Bison bison* (Linnaeus, 1758) and Marco Polo sheep *Ovis ammon poli* Blyth, 1841 and domestic Camargue cattle *Bos taurus* Linnaeus, 1758 as examples in a discussion of scraping the ground. Swiss zoo director Heini Hediger included the extinct aurochs *Bos primigenius* Bojanus, 1827, European bison *Bison bonasus* (Linnaeus, 1758) and domestic cattle *Bos taurus* among sets of wild and domestic forms used as examples in discussions of domestication and its effects (Hediger, 1964, 1968, 1969). Cases like these, in which clear distinction between the wild and domestic forms is critically important, are inherent in ethology. No matter which fashion in naming domestic animals is currently being followed, minimizing confusion over which form is meant will promote useful discussion.

Applied ethology also benefits from retaining the traditionally separate names set out in the application. A distinction between wild and domestic forms helps to reduce confusion when animal owners request advice. Is it the wild or the domestic form which is referred to? What management options would be most appropriate? This is not just a question involving zoo personnel or those in the pet trade. In addition to import and export regulations, I have been especially aware of this need for clarity among owners of ungulates of foreign origin kept on ranches in the Americas (see Mungall & Sheffield, 1994). Ranches raising 'exotics' of this sort are most prevalent in the state of Texas in the U.S.A. There, the latest state census (see Mungall, 1994) estimated 182,008 head of foreign wildlife, including the wild bezoar goat *Capra aegagrus* Erxleben, 1777 and the guanaco *Lama guanicoe* (Müller, [1776]), and

domestics such as the llama *Lama glama* (Linnaeus, 1758) and alpaca *Lama pacos* (Linnaeus, 1758). When questions arise concerning, for example, camel, gaur, water buffalo, mouflon, goat or sheep, the first task is to define which animal is actually under discussion, since representatives of all these – some wild and some domestic have been kept. Ranchers take the distinctions between wild and domestic forms more seriously when the scientific names are distinct. Separate names encourage owners to keep separate records and to avoid interbreeding, unless hybridization is an intentional goal (see Mungall & Sheffield, 1994). This distinction has far-reaching consequences – ever since the Indian blackbuck *Antilope cervicapra* (Linnaeus, 1758) led the way with repeated shipments back to native habitat in Pakistan, Texas ranch populations have been looked upon by many exotic breeders as potential reservoirs for restocking efforts to rebuild wild populations.

Therefore, I consider that ethology, both pure and applied, is among the disciplines which would be best served by retention of separate names for wild and domestic forms. As a first step, approval by the Commission of the names for wild species will be most welcome, ensuring that there is a clear ruling to follow.

Additional references

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Mungall, E.C. & Sheffield, W.J. 1994. *Exotics on the range: the Texas example*. xii, 256 pp. Texas A & M University Press, College Station.

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Walther, F.R. 1984. *Communication and expression in hoofed mammals*. xxii, 423 pp. Indiana University Press, Bloomington.

(3) Andrea Sforzi

Museo Civico di Storia Naturale, via G. Mazzini 61, 58100 Grosseto, Italy

This application is without any doubt necessary and worthwhile. The authors have finally succeeded in filling an important gap, concerning the nomenclature of 15 wild mammal species with domestic derivatives, which first became apparent 25 years ago (Groves's original application to the Commission, published in BZN **27**: 269–272, March 1971).

The problem of setting out precise rules to deal with the names for wild species which are distinct from, and are contemporary or postdate, those for related domestic animals, has never been solved. The specific names based on wild populations are not protected at the moment against earlier names based on domestic

forms which might be considered to be synonyms, and under the Code these latter should have precedence. Linnaeus's (1758, 1766) names for domestic forms have been applied to the wild species by a few authors, resulting in ambiguity and considerable confusion.

The Code urges stability in names and the solution proposed in the application for the names for wild species is the most up-to-date and appropriate in terms of current usage. The proposed names are in accord with those adopted by most authors.

I have been working on the European wildcat for more than nine years and am still active in field research relating to its biology and conservation in Italy and some islands of the Mediterranean rim. With Prof B. Ragni of Perugia University I am also beginning a new genetic revision of Italian cat populations. Ragni & Randi (1986) have previously published on wildcat systematics, and Randi & Ragni (1991) on genetics.

The proposal in the application that the European wildcat should be called *Felis silvestris* Schreber, [1777] (and not *Felis catus*, which was Linnaeus's 1758 name for the domestic cat) is in my view completely correct, and its approval by the Commission will at last give a definitive and acceptable ruling. Although most of the authors working on wildcats (see, for example, Miller, 1912; Pocock, 1951; Suminski, 1962; Shauenberg, 1969; Kratochvil, 1976; Corbet & Ovenden, 1980; Nowak & Paradiso, 1983; Ragni & Randi, 1986; Corbet & Hill, 1991; Hemmer, 1991; Kitchener, 1991; Wilson & Reeder (Eds.), 1993; Hausser (Ed.), 1995; Ragni et al., 1995; and Nowell & Jackson, 1996) have adopted *silvestris*, the absence of an official ruling has sometimes led to confusion. Approval will ensure that this will not arise in the future.

Additional references

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Randi, E. & Ragni, B. 1991. Genetic variability and biochemical systematics of domestic and wild cat populations (*Felis silvestris*: Felidae). *Journal of Mammalogy*, **72**(1):79–88.

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(4) Piotr Wyrost

Profesor Zwycz. Nauk Wet., pl. Grunwaldzki 17 m. 41, 50 378 Wroclaw, Poland

I have read with interest the application 'Proposed conservation of 15 mammal specific names ...'.

I completely agree with the proposals contained therein and support them wholly.

(5) Richard Schodde

Australian National Wildlife Collection, CSIRO Division of Wildlife and Ecology, P.O. Box 84, Lyneham, ACT 2602, Australia

With cordial respects to the proponents of this application, I am opposed to it for the following reasons:

1. In advocating validation of a set of junior names based on wild stock without rejection of senior names based on domestic stock of the same 'species', the proposal confounds the primal tenet of the Code, namely that the name of each taxon is unique and distinct (see the Preamble to the Code). It would create, in effect, pairs of alternative names for the same taxa, one for animals of wild origin and one for those of domestic origin. If these pairs are, indeed, taxonomically different (Kitchener's comment in BZN **53**: 194–196) then they may be distinguished nomenclaturally according to their assessed level of differentiation (species, subspecies) under existing provisions of the Code without invoking the plenary powers.

2. The proposal is incomplete insofar as it does not specify how the senior synonyms based on domestic stock are to be treated.

3. The proposal will create as much confusion as it resolves. My reading of support for it gives me the impression that it comes largely from a relatively small group of archeozoologists, and they may well feel comfortable with it. For vertebrate neontologists like myself, and the now very large world of ecologists, conservation biologists and wildlife managers, the proposal brings confusing complications that destabilize universality in zoological nomenclature. These biologists would not only have to learn the two sets of names but also understand how, when and where to apply them. That is nor often clear-cut.

4. The potential for destabilization is epitomised in feral animals. On one side they are derived from domestic stock and on the other re-approach wild stock in form and genetic structure through free out-breeding. So they blur the distinctions between domestic and wild, and some more than others. Where should the line be drawn nomenclaturally? Perhaps a third set of names would be advocated for ferals. So complication and confusion may escalate.

5. Further destabilization can arise from future proposals to extend paired wild stock/domestic stock nomenclature to other species beyond the 15 specified in the present proposal. This has already been foreshadowed by Gautier (BZN **53**: 194), exposing the proposal to some of the same criticisms that led to the lapsing of an earlier application to invalidate all names based on domestic stock.

6. Because of the precedents for future destabilization implicit in paras. 3, 4 and 5 above, I urge the Commission to rule against the present proposal.

7. In the interests of resolving the difficulties that archeozoologists have with the nomenclature for wild and domestic stock, I suggest the following solutions:

(a) if wild and domestic stock of a given lineage are taxonomically differentiated, carry out research to demonstrate the level of differentiation and then classify it at the appropriate nomenclatural level under existing provisions of the Code; and/or,

(b) adopt a system of distinction of the kind advocated by Odening (1979; see para. 5 of the application). That will provide a convention for separation, to which a system for ferals may be added, without contravening the principles of the Code.

(6) Walter J. Bock

Department of Biological Sciences, Columbia University, New York, NY 10027, U.S.A.

The problem described by Gentry, Clutton-Brock & Groves in the use of specific names for the set of 15 species of mammals possessing different names for domesticated and wild forms is a serious one indeed and should have been resolved long ago. A settlement of this problem must be obtained without delay. However, I feel that I must oppose the solution proposed in the application because it is at variance with the most basic tenet of zoological nomenclature. My reasons are as follows:

1. The request that the Commission use its plenary powers to rule that the name for each of the wild forms of these mammals mentioned in the proposal 'is not invalid by virtue of being antedated by a name based on a domestic form' is unclear. Does this request mean that the names proposed for the 'wild form' have precedence over those proposed for the 'domesticated forms'? If so, this should be stated clearly in the proposal. Or does this request mean, as I understand it does, that the name of the 'wild form' is to be valid, but without the name of the 'domesticated form' being invalid? If this is the case, then acceptance of the request in this application means that two valid names will exist for each of these 15 species of mammals. Hence, if the proposal is approved by the Commission, zoologists would be free to use either the name originally proposed for the 'domesticated form' or for the 'wild form' when dealing with a particular mammalian species taxon mentioned in the list (BZN **53**: 34).

2. If my understanding of the proposal is correct, it violates the principal canon of zoological nomenclature as stated in the Preamble of the Code, that the name for each taxon is unique and distinct, by proposing that there be alternative names for the same taxon depending on whether the worker is referring to the wild form or the domesticated form. This proposal does not specify how the senior synonyms based on domesticated forms are to be treated, and which name should be used if a zoologist considers the domesticated and the wild form to be members of the same species. One reading of the proposal is that the available names based on the wild form have precedence over those based on the domesticated form, but this is not made clear in the proposal. If this is the intention, I would be most unhappy to have a number of well-known names proposed by Linnaeus (1758) declared to lack precedence with respect to later names.

3. If mammalogists, archeozoologists and students of domesticated mammals consider the domesticated form to be a distinct taxon, either a species or a subspecies,

then names are available for these taxa. Which name is used for the species taxon and for the subspecies taxa for each mammal mentioned in the list should be decided on the basis of priority as there does not appear to be any foundation for a decision based on well-established usage.

4. This proposal and request to the Commission has the potential of creating considerable confusion and destabilization in nomenclature of these 15 species of mammals for zoologists, especially for the large number of ecologists, wildlife biologists and conservationists dealing with these species. These zoologists will have to learn two sets of names and rules for their use. Yet this application does not specify when either of the two available names should be used. And the decision on which name to use may not be at all clear in many cases, especially for feral populations or for populations for which it is not clear whether they are feral or wild. Moreover acceptance of the request presented in this proposal could well establish an unfortunate precedent for other names for animals based on 'wild' and 'domesticated' forms.

Because this proposal violates the most basic provision of the Code and because of its potential for future confusion and destabilization, I urge the Commission to rule against its requests. If the Commission so rules, then all zoologists dealing with these 15 species of mammals should be urged most strongly to use the proper valid name for these taxa based on priority.

(7) Alfred L. Gardner

U.S. Geological Survey-Biological Resources Division, National Museum of Natural History, Washington, D.C. 20560–0111, U.S.A.

I oppose the intent in the application by Gentry, Clutton-Brock & Groves to request the Commission to rule that 15 scientific names are 'not invalid by virtue of being antedated by a name based on a domestic form'. I have not examined the original descriptions of every one of these names to determine whether or not each is available, but for the present I presume they are. Therefore, if each name meets the criteria required in the Code, these names already are available and no action is necessary. Each of these names is valid if the worker using them believes the domestic and wild form represent separate species. Placing these 15 names on the Official List neither mandates nor guarantees their usage. The Commission cannot make rulings that are biological in nature. The three-part proposal (BZN 53: 33) will do nothing to solve the problem of inconsistent usage.

The central issue is a question of conspecificity; therefore, a biological one, not nomenclatural. Obviously, when a worker considers a domesticated form and its presumed progenitor to be conspecific, the senior synonym should be used. To do otherwise reveals either naivety on the part of the user, confusion about definition of biological species, or disregard for the rules of nomenclature. As stated, the editorial policy of Wilson & Reeder (1993) was to use the earliest available name for each taxon. Exceptions to that policy were oversights, a not too unlikely event considering the massive size of the work (xviii, 1206 pages). To castigate Wilson & Reeder for attempting to adhere to rules of nomenclature, even if they did deviate from 'majority usage', is to cast aspersions in the wrong direction. My personal opinion is that truly

domesticated mammals in most cases are reproductively isolated from their wild progenitors and warrant species status. Occasional interbreeding between wild and domesticated stocks does not void separate species status; interspecific hybridization is common in nature (see, for example, Blair & Hubbs, 1961).

The Abstract of the application states: 'It is proposed that majority usage be confirmed by adoption of the first available specific name based on a wild population for the following wild taxa ... [15 names follow]'. Under para. 9 the authors state: '... we now propose that the usage for wild taxa of the first available names based on wild species should be conserved'. It appears to me that the authors intend by this application to direct the Commission to set aside all 15 senior names based on domesticates. Nevertheless, their proposals (para. 11 on BZN **53**: 33) fail to require such action. If the authors' application intends rejection of all names originally based on domestics, they should say so in their statement of proposals.

Clearly the intent of the proposal was to suppress availability of names based on domesticated mammals when names based on their wild progenitors are otherwise not used because they are junior synonyms. How would this impact on those names based on domestics that also are type species of their respective genera? I find it implausible that this solution to a 'problem' is touted as in the best interest of stability of nomenclature. Are not populations of domesticated mammals recognizable entities? I suggest that if Gentry, Clutton-Brock & Groves consider the coypu (*Myocastor coypus*; see para. 2 of the application) domesticated because the species is reared in captivity, they must also include ranched fox and mink. Also, what about gerbils, hamsters and chinchillas? Should the list of domesticates include *Homo sapiens*, which in the majority is surely by now domesticated? Last, but not least, the wild progenitor of the guinea pig (*Cavia porcellus*) may not be *C. aperea* but *C. tschudii*.

The following members of the Committee on Nomenclature of the American Society of Mammalogists support these comments: Mark S. Hafner, Clyde Jones, James L. Patton, Karl Koopman, Don E. Wilson.

Additional reference

Blair, W.F. & Hubbs, C. 1961. Biological species and phylogenetic taxonomy. *Systematic Zoology*, **10**: 42–43.

(8) Charles O. Handley, Jr.

Division of Mammals, MRC-108, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560, U.S.A.

I do not support the intent of the proposal of Gentry, Clutton-Brock & Groves to conserve the usage of 15 specific names of wild mammals which are antedated by or are contemporary with names of domestic mammals. The problem cited by these authors is that: 'A number of systems have been devised for the naming of domestic animals but none has gained universal acceptance'. This is not surprising since there are no rules governing informal schemes which circumvent the Code. The Commission should not be concerned with such schemes or with proposals to make them respectable.

The Code provides an unequivocal basis for naming taxa and for applying the names to zoological entities. Fortunately it does not exclude some entities from classification and include others. It includes all zoological entities. The Code is intended to make the naming and classification of taxa almost automatic, entirely within the domain of taxonomists. It should be necessary for the Commission to intervene only when it seems that questions of nomenclature cannot be resolved by taxonomists adhering to the Code. Definition of species is a zoological problem which should be resolved by zoologists.

Some species of mammals have been more or less domesticated and consequently more or less altered morphologically from their wild ancestors. Domestication does not make a mammal any less of a zoological entity than it was before domestication. The question in simplest terms is: 'Has domestication altered the mammal to the species level or is it still conspecific with its wild ancestor?'. Whatever the answer, the oldest available properly formed name should be applied. In this instance it is inconceivable that any names could be more available than those of Linnaeus (1758)!

The question of rank of taxa is not unique to domesticated mammals. It is a question confronted by taxonomists every day in dealing with shrews, bats, rodents, and all other mammals. They marshal the data, make a determination, conspecific or not, and apply names, based on facts and interpretations. The process should be the same with domesticated mammals. They exist as zoological entities and they have nomenclaturally acceptable names. Zoologists should get on with the job of determining taxonomic rank and apply the oldest available name. Suppression of Linnaean names in favor of names decades or even more than a hundred years younger should not be considered as an option in dealing with the perceived problem of status of names of domestic mammals. All zoologists should abide by and support the Code.

(9) Anthea Gentry
Littlewood, Copyhold Lane, Cuckfield, Haywards Heath, West Sussex RH15 5EB, U.K.

Juliet Clutton-Brock
Working Group on Nomenclature, International Council of Archaeozoology, c/o Department of Zoology, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

Colin P. Groves
Department of Archaeology and Anthropology, The Australian National University, Canberra, A.C.T. 0200, Australia

It is clear from the four comments above (nos. 5–8) that the authors are misunderstanding and misinterpreting the purpose of our application. We wish to explain further and to put the matter straight.

There are very many wild species with domestic derivatives (several were listed in Corbet & Clutton-Brock, 1984). Of the names for these currently in use, the wild and domestic forms generally share the same name and in only a few cases are the names for the two forms traditionally distinct. There has been confusion in the literature in

that, in most cases, names based on domestic forms, or encompassing both the wild and domestic forms, were published earlier (Linnaeus, 1758, 1766, and some other authors) than those for the wild taxa and some authors, disregarding majority usage, have applied them to wild species.

Our application seeks to solve this problem by conserving the first available names based on wild populations as the valid names *for the wild taxa*, whether or not the domestic forms are considered as 'conspecific', i.e. can be included in the same species. In a comment on this application (BZN 53: 193), Dr Gordon Corbet noted: 'Implementation of this proposal will stabilize the names of the wild species, while allowing freedom of taxonomic judgement as to what degree of domestication can be encompassed in the species-concept employed. This is particularly important in many archaeological studies where the ancestral wild species is usually not in doubt while the evidence of domestication is debatable'. Our application deals only with the names for wild taxa, and then only with the 15 names which by convention are distinct from, and predate or are contemporary with, those of their domestic derivatives, and is not concerned with the on-going discussion on the nomenclature of domestic animals.

Views differ on the 'conspecificity' of the wild and domestic forms. This is an entirely biological (or, more accurately, semantic) question. Whatever view is taken, domestic animals are, as Dr Alfred Gardner notes in his comment (no. 7 above), 'recognizable entities'. As a consequence they have vernacular names, but these are confined to individual languages and for universal scientific and other usage it is desirable that the latinized equivalents should not be disqualified on artificial grounds such as publication dates. For example, it is important for conservation reasons that the name *Ovis orientalis* for the Asian wild mouflon should not be submerged by *O. aries* (sheep), regardless of any view as to their 'conspecificity'.

Feral animals (mentioned by Dr Richard Schodde and Dr Walter Bock in their comments (5) and (6) above) are those that live in a self-sustained population in the wild after a history of domestication (see Clutton-Brock, 1992, p. 19). Names used are therefore those based on domestic forms: for example, *Ovis aries* for the European mouflon, *Canis familiaris* or *C. familiaris dingo* for the dingo (as cited in the Table in our application, BZN 53: 34) and *Canis familiaris* or *C. familiaris hallstromi* for the New Guinea singing dog. Similarly, the name *Oryctolagus cuniculus* applies to the western Mediterranean wild rabbit and the almost world-wide feral rabbit.

It is not only in archaeology, where the distinction between wild species and domestic forms and intermediate stages is crucial, that the clear and unambiguous separation of the names for wild and domestic forms is desirable and beneficial (cf. comments by Dr Schodde and Dr Bock, nos. (5) and (6) above). Zoologists in the broadest sense have followed this approach. So far there have been 31 comments in support of our application, received from authors working in extant zoology, palaeontology, conservation, endangered species management, ethology and specimen curation, as well as in archaeology (see BZN 53: 125, 192–200, 286–288, and comments (1)–(4) above). In conservation legal documentation is an issue, and in the most recent publication (1966) issued by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) names based on wild species have been used for protected wild taxa. To switch now to names based on domestic

forms would be illogical and would bring not only enormous and prolonged confusion but potentially serious consequences.

As noted above, our current application deals only with the names for wild taxa and we have made no proposals for a standard way of naming domestic animals. There are several systems currently in use, some of which are mentioned in the case, others were included in Groves's (1971) application and in Gautier (1993); see the comment by Dr Henry Gee (BZN **53**: 288). Contrary to Dr Gardner's and Dr Handley's suppositions (comments (7) and (8) above), we have not proposed, and we emphasize that it is not our intention, that names based on domestic forms should be suppressed. Indeed, notational systems of nomenclature for domestic forms such as those proposed by Bohlken (1958, 1961), Dennler de la Tour (1959, 1968) and Odening (1979) are not in accord with the Code (paras. 4 and 5 of the application) and their use should not be encouraged.

Additional references

Clutton-Brock, J. 1992. *Horse power: a history of the horse and donkey in human societies.* Natural History Museum Publications & Harvard University Press.

World Conservation Monitoring Centre. 1996. *Checklist of CITES Species. A reference to the appendices to the International Trade in Endangered Species of Wild Fauna and Flora.* 400 pp. CITES Secretariat & World Conservation Monitoring Centre, Cambridge, U.K.

OPINION 1868

Patella longicosta Lamarck, 1819 (Mollusca, Gastropoda): specific name conserved

Keywords. Nomenclature; taxonomy; Gastropoda; limpets; *Patella*; South Africa.

Ruling

(1) Under the plenary powers the specific name *digitata* Fischer von Waldheim, 1807, as published in the binomen *Patella digitata*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *longicosta* Lamarck, 1819, as published in the binomen *Patella longicosta*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *digitata* Fischer von Waldheim, 1807, as published in the binomen *Patella digitata* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2947

An application for the conservation of the specific name of *Patella longicosta* Lamarck, 1819 was received from Dr D.G. Herbert (*Natal Museum, Pietermaritzburg, KwaZulu-Natal, South Africa*) on 24 August 1994. After correspondence the case was published in BZN **52**: 234–235 (September 1995). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 December 1996 the members of the Commission were invited to vote on the proposals published in BZN **52**: 234–235. At the close of the voting period on 1 March 1997 the votes were as follows:

Affirmative votes — 24: Bock, Bouchet, Brothers, Cocks, Dupuis, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Nye, Papp, Patterson, Savage, Schuster, Song, Štys

Negative votes — none.

No vote was received from Cogger.

Ride was on leave of absence.

Bouchet commented: 'The application has adequately demonstrated the widespread usage of the name *Patella longicosta* outside specialized taxonomic literature'.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

digitata, *Patella*, Fischer von Waldheim, 1807, *Muséum-Demidoff mis en ordre systématique et décrit*, vol. 3, p. 115.

longicosta, *Patella*, Lamarck, 1819. Patelle. *Patella*. *In*: *Histoire naturelle des animaux sans vertèbres*, vol. 6, part 1, p. 326.

OPINION 1869

Monstrilla Dana, 1849 and *Thaumaleus* Krøyer, 1849 (Crustacea, Copepoda): conserved

Keywords. Nomenclature; taxonomy; Copepoda; MONSTRILLIDAE; *Monstrilla*; *Thaumaleus*.

Ruling

(1) Under the plenary powers the name *Thaumatoessa* Krøyer in Gaimard, [1842] is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:
   (a) *Monstrilla* Dana, 1849 [4 September] (gender: feminine), type species by monotypy *Monstrilla viridis* Dana, 1849;
   (b) *Thaumaleus* Krøyer, 1849 [31 December] (gender: masculine), type species by monotypy *Thaumatoessa typica* Krøyer in Gaimard, [1842].

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:
   (a) *viridis* Dana, 1849, as published in the binomen *Monstrilla viridis* (specific name of the type species of *Monstrilla* Dana, 1849);
   (b) *typica* Krøyer in Gaimard, [1842], as published in the binomen *Thaumatoessa typica* (specific name of the type species of *Thaumaleus* Krøyer, 1849).

(4) The name MONSTRILLIDAE Dana, 1849 (type genus *Monstrilla* Dana, 1849) is hereby placed on the Official List of Family-Group Names in Zoology.

(5) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
   (a) *Thaumatoessa* Krøyer in Gaimard, [1842], as suppressed in (1) above;
   (b) *Thaumatoessa* Heine, 1863 (a junior objective synonym of *Loddigesia* Gould in Bonaparte, 1849 and a junior homonym of *Thaumatoessa* Krøyer in Gaimard, [1842]).

History of Case 2894

An application for the conservation of the names *Monstrilla* Dana, 1849 and *Thaumaleus* Krøyer, 1849 was received from Dr M.J. Grygier (*Lake Biwa Museum, Kusatsu, Shiga, Japan*) on 17 May 1993. After correspondence the case was published in BZN **52**: 245 249 (September 1995). Notice of the case was sent to appropriate journals.

A comment in support from Prof Charles C. Davis (*Memorial University of Newfoundland, St John's, Newfoundland, Canada*) was published in BZN **53**: 46–47 (March 1996).

Further supportive comments from Dr David M. Damkaer (*Monroe, Washington, U.S.A.*) and from two members of the Nomenclature Committee of The Crustacean Society (Dr A.B. Williams, *NOAA/NMFS Systematics Laboratory, Smithsonian*

Institution, Washington, D.C., U.S.A., and Dr Gary C.B. Poore, *Museum of Victoria, Abbotsford, Victoria, Australia*) were published in BZN **53**: 122–123 (June 1996).

Decision of the Commission

On 1 December 1996 the members of the Commission were invited to vote on the proposals published in BZN **52**: 248. At the close of the voting period on 1 March 1997 the votes were as follows:

Affirmative votes — 21: Bock, Bouchet, Brothers, Cocks, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nye, Papp, Patterson, Savage, Schuster, Song, Štys

Negative votes — 1: Lehtinen.

Dupuis abstained.

No votes were received from Cogger and Nielsen.

Ride was on leave of absence.

Dupuis commented: 'I refuse to vote on this case because in my personal view the time between the last comments and the distribution of voting papers was too short. The last comments were less than one year old'. [*Editorial note*. The comments were in support. An explanation of procedure followed in sending cases for voting was given in BZN **54**: 53–54, March 1997].

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Monstrilla Dana, 1849 [4 September], *Conspectus Crustaceorum quae in Orbis Terrarum circumnavigatione* ..., pars I and II, p. 53.

MONSTRILLIDAE Dana, 1849 [4 September], *Conspectus Crustaceorum quae in Orbis Terrarum circumnavigatione* ..., pars I and II, p. 53.

Thaumaleus Krøyer, 1849 [31 December], *Naturhistorisk Tidsskrift*, Ny Hæfte, **2**(6): 604.

Thaumatoessa Heine, 1863, *Journal für Ornithologie*, **11**(63): 209–210.

Thaumatoessa Krøyer, [1842], *in* Gaimard, J.P. (Ed.), *Atlas de zoologie* ..., pl. 42, figs. 4a–e.

typica, Thaumatoessa, Krøyer, [1842], *in* Gaimard, J.P. (Ed.), *Atlas de zoologie* ..., pl. 42, figs. 4a–e.

viridis, Monstrilla, Dana, 1849 [4 September], *Conspectus Crustaceorum quae in Orbis Terrarum circumnavigatione* ..., pars I and II, p. 53.

OPINION 1870

Sicus Scopoli, 1763 and *Myopa* Fabricius, 1775 (Insecta, Diptera): conserved by the designation of *Conops ferrugineus* Linnaeus, 1761 and *C. buccatus* Linnaeus, 1758 as the respective type species; and *Coenomyia* Latreille, 1796 placed on the Official List

Keywords. Nomenclature; taxonomy; Diptera; CONOPIDAE; COENOMYIIDAE; XYLOPHAGIDAE; *Sicus*; *Myopa*; *Coenomyia*; *Conops buccatus*; *Conops ferrugineus*; *Musca ferruginea*.

Ruling

(1) Under the plenary powers all previous fixations of type species are hereby set aside for the following nominal genera:
  (a) *Sicus* Scopoli, 1763 and *Conops ferrugineus* Linnaeus, 1761 is designated as the type species;
  (b) *Myopa* Fabricius, 1775 prior to the designation by Curtis (1838) of *Conops buccatus* Linnaeus, 1758.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:
  (a) *Sicus* Scopoli, 1763 (gender: masculine), type species by designation under the plenary powers in (1)(a) above *Conops ferrugineus* Linnaeus, 1761;
  (b) *Myopa* Fabricius, 1775 (gender: feminine), type species by subsequent designation by Curtis (1838) *Conops buccatus* Linnaeus, 1758, as ruled in (1)(b) above;
  (c) *Coenomyia* Latreille, 1796 (gender: feminine), type species by subsequent monotypy by Latreille ([1802]) *Musca ferruginea* Scopoli, 1763.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  (a) *ferrugineus* Linnaeus, 1761, as published in the binomen *Conops ferruginea* (sic) (specific name of the type species of *Sicus* Scopoli, 1763);
  (b) *buccatus* Linnaeus, 1758, as published in the binomen *Conops buccata* (sic) (specific name of the type species of *Myopa* Fabricius, 1775);
  (c) *ferruginea* Scopoli, 1763, as published in the binomen *Musca ferruginea* (specific name of the type species of *Coenomyia* Latreille, 1796).

(4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
  (a) *Cylindrogaster* Lioy, 1864 (a junior objective synonym of *Sicus* Scopoli, 1763);
  (b) *Myopella* Robineau-Desvoidy, 1853 (a junior objective synonym of *Myopa* Fabricius, 1775);
  (c) *Sicus* Latreille, 1796 (a junior homonym of *Sicus* Scopoli, 1763);
  (d) *Sicus* Fabricius, 1798 (a junior objective synonym of *Coenomyia* Latreille, 1796 and a junior homonym of *Sicus* Scopoli, 1763).

History of Case 2881

An application for the conservation of the generic names *Sicus* Scopoli, 1763 and *Myopa* Fabricius, 1775 by the designation of *Conops buccatus* Linnaeus, 1758 as the

type species of *Myopa* was received from Dr Sidney Camras (*Field Museum of Natural History, Chicago, Illinois, U.S.A.*) on 22 February 1993. After correspondence the case was published in BZN **51**: 31–34 (March 1994). Notice of the case was sent to appropriate journals.

Comments from Dr Curtis W. Sabrosky (*Medford, New Jersey, U.S.A.*) and from Dr Terry A. Wheeler (*University of Guelph, Guelph, Ontario, Canada*), published in BZN **51**: 260–261 (September 1994), supported the proposals to conserve the names *Sicus* Scopoli, 1763 and *Myopa* Fabricius, 1775 (family CONOPIDAE) as currently understood (with *Conops ferrugineus* Linnaeus, 1761 and *C. buccatus* Linnaeus, 1758 as the respective type species).

Drs Sabrosky and Wheeler both pointed out, however, that the proposed rejection of *Coenomyia* Latreille, 1796 as a junior objective synonym of *Sicus* Scopoli was an error and should not have been included in the application (cf. paras. 6 and 7(4)(b)). They noted that '*Sicus ferrugineus* F.' (= Fabricius), included as the single species in *Coenomyia* by Latreille ([1802]), was a subsequent usage of *Musca ferruginea* Scopoli, 1763 and a taxon distinct from *Conops ferruginea* (recte *ferrugineus*) Linnaeus, 1761. The name *Coenomyia* is in use and refers to a widespread Holarctic genus (family COENOMYIIDAE or XYLOPHAGIDAE). Sabrosky (1961) had designated *Musca ferruginea* Scopoli as the type of *Sicus* Fabricius, 1798, rendering the latter a junior objective synonym of *Coenomyia*, as well as being a junior homonym of *Sicus* Scopoli (cf. paras. 6 and 7(4)(f) of the application).

A further comment from Dr Donald W. Webb (*Illinois Natural History Survey, Champaign, Illinois, U.S.A.*) also pointed out that the rejection of *Coenomyia* should be dropped.

In a comment by Mrs A. Gentry (*The Secretariat, ICZN*), approved and endorsed by the author of the application and published in BZN **52**: 74–75 (March 1995), the proposed rejection of *Coenomyia* was withdrawn and replaced by a proposal to place the name on the Official List.

Scopoli (1763) placed two nominal species in the new genus *Sicus*. He attributed *buccata* (recte *buccatus*) to Linnaeus (1758) but did not give the authorship and date of *ferrugineus*. Almost all authors from Fabricius (1775) onwards (para. 1 of the application and the comments by Drs Sabrosky and Wheeler) have accepted *Sicus ferrugineus* of Scopoli (1763) as a synonym of *Conops ferrugineus* Linnaeus, 1761 and Coquillet's (1910) designation of *C. ferrugineus* as the type of the genus.

A comment from Dr F.C. Thompson (*Systematic Entomology Laboratory, Smithsonian Institution, Washington, U.S.A.*) supported the proposals to conserve the current concepts of *Sicus* and *Myopa* but noted that in 1767 Linnaeus himself (*Systema Naturae*, Ed. 12, pp. 1005, 1006) treated *Conops ferrugineus* Linnaeus, 1761 and *Sicus ferrugineus* Scopoli, 1763 (which he renamed *C. testacea*, recte *testaceus*, presumably to avoid secondary homonymy in *Conops*) as distinct taxa, and that the type designation for *Sicus* by Coquillet (1910), which referred only to *Conops ferrugineus* Linnaeus (a nominal species not originally included in *Sicus*) and did not mention *Sicus ferrugineus* Scopoli, was therefore invalid. To avoid any confusion in the future it was proposed that *Conops ferrugineus* Linnaeus, 1761 be designated the type of *Sicus* Scopoli, 1763 under the plenary powers, in accord with accustomed usage and the application.

Dr Thompson also pointed out that *Conops testaceus* Linnaeus, 1767 (= *Sicus ferrugineus* Scopoli, 1763) is the first species mentioned in association with *Stomoxoides* Schaeffer, 1766 (included as a synonym of *Conops* Linnaeus, 1758 by Linnaeus, 1767) and that *C. testaceus* is therefore the type species by subsequent monotypy of *Stomoxoides* (cf. para. 5 of the application). The proposed placement of the name *Stomoxoides* on the Official Index (para. 7(4)(a) of the application) as a junior objective synonym of *Sicus* Scopoli was therefore withdrawn.

Decision of the Commission

On 1 December 1996 the members of the Commission were invited to vote on the revised proposals. At the close of the voting period on 1 March 1997 the votes were as follows:

Affirmative votes — 24: Bock, Bouchet, Brothers, Cocks, Dupuis, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Nye, Papp, Patterson, Savage, Schuster, Song, Štys

Negative votes — none.

No vote was received from Cogger.

Ride was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

buccatus, *Conops*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 605.

Coenomyia Latreille, 1796, *Précis des caractères génériques des insectes, disposés dans un ordre naturel*, p. 159.

Cylindrogaster Lioy, 1864, *Atti dell'Istituto Veneto di Scienze, Lettere ed Arti*, (3)**9**(2): 1327.

ferruginea, *Musca*, Scopoli, 1763, *Entomologica carniolica exhibens insecta ...*, p. 340.

ferrugineus, *Conops*, Linnaeus, 1761, *Fauna svecica sistens animalia sveciae regni*, Ed. 2, p. 468.

Myopa Fabricius, 1775, *Systema entomologiae ...*, p. 798.

Myopella Robineau-Desvoidy, 1853, *Bulletin de la Société des Sciences Historiques et Naturelles de l'Yonne*, **7**: 98.

Sicus Fabricius, 1798, *Supplementum Entomologiae Systematicae*, pp. 547, 554.

Sicus Latreille, 1796, *Précis des caractères génériques des insectes, disposés dans un ordre naturel*, p. 158.

Sicus Scopoli, 1763, *Entomologica carniolica exhibens insecta ...*, p. 369.

The following is the reference for the designation of *Conops buccatus* Linnaeus, 1758 as the type species of the nominal genus *Myopa* Fabricius, 1775:

Curtis, J. 1838. *British entomology; being illustrations and descriptions of the genera of insects found in Great Britain and Ireland*, pl. 677, text.

The following is the reference for the fixation of *Musca ferruginea* Scopoli, 1763 as the type species of the nominal genus *Coenomyia* Latreille, 1796:

Latreille, P.A. [1802]. *Histoire naturelle, générale et particulière des crustacés et des insectes*, vol. 3, p. 439.

OPINION 1871

Iodotropheus sprengerae Oliver & Loiselle, 1972 (Osteichthyes, Perciformes): holotype replaced by a neotype

Keywords. Nomenclature; taxonomy; Osteichthyes; CICHLIDAE; rusty cichlid; *Iodotropheus sprengerae*; Lake Malawi.

Ruling

(1) Under the plenary powers all previous fixations of type specimens for the nominal species *Iodotropheus sprengerae* Oliver & Loiselle, 1972 are hereby set aside and the male specimen PSU 2721 in the Fish Museum, The Pennsylvania State University, U.S.A. is designated as the neotype.

(2) The name *Iodotropheus* Oliver & Loiselle, 1972 (gender: masculine), type species by monotypy *Iodotropheus sprengerae* Oliver & Loiselle, 1972, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *sprengerae* Oliver & Loiselle, 1972, as published in the binomen *Iodotropheus sprengerae* and as defined by the neotype designated in (1) above (specific name of the type species of *Iodotropheus* Oliver & Loiselle, 1972), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2955

An application to replace the holotype of *Iodotropheus sprengerae* Oliver & Loiselle, 1972 with a neotype was received from Prof Jay R. Stauffer, Jr. (*The Pennsylvania State University, Pennsylvania, U.S.A.*) on 18 October 1994. After correspondence the case was published in BZN **52**: 321–323 (December 1995). Notice of the case was sent to appropriate journals.

It was noted on the voting papers that the holotype and paratypes of *Iodotropheus sprengerae* (para. 1 of the application) were presented to the Natural History Museum, London, by M. Oliver and P. Loiselle and were all entered in the fish specimen register as 'Aquarium raised'.

Decision of the Commission

On 1 December 1996 the members of the Commission were invited to vote on the proposals published in BZN **52**: 323. At the close of the voting period on 1 March 1997 the votes were as follows:

Affirmative votes — 18: Bock, Bouchet, Brothers, Cocks, Eschmeyer, Heppell, Kabata, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Nye, Papp, Patterson, Schuster, Song

Negative votes — 5: Dupuis, Kraus, Lehtinen, Savage and Štys.

Kerzhner abstained.

No vote was received from Cogger.

Ride was on leave of absence.

Voting against, Dupuis commented that it would have been preferable to change the type species of the genus rather than the holotype of the existing type species. Savage commented: 'It appears that the type material of *Iodotropheus sprengerae*

could well represent a species not subsequently collected'. Štys commented: 'I consider that this case is premature. The taxonomy has not been sorted out and there is always a possibility that the original wild population of *I. sprengerae* will be found. There are several possible methods for recognizing if the holotype is really a hybrid'. Abstaining, Kerzhner commented: 'Although the differences of the type series of *Iodotropheus sprengerae* from the wild specimens very probably are explained by hybridization, other explanations, including that they belong to a separate species or population, seem possible'.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Iodotropheus Oliver & Loiselle, 1972, *Revue de Zoologie et de Botanique Africaines*, **85**(3–4): 310.

sprengerae, *Iodotropheus*, Oliver & Loiselle, 1972, *Revue de Zoologie et de Botanique Africaines*, **85**(3–4): 310.

OPINION 1872

Siboma atraria Girard, 1856 (currently *Gila atraria*; Osteichthyes, Cypriniformes): specific name conserved

Keywords. Nomenclature; taxonomy; Osteichthyes; Cypriniformes; Utah chub; *Gila atraria*; *Tigoma lineata*; United States of America.

Ruling

(1) Under the plenary powers the specific name *lineata* Girard, 1856, as published in the binomen *Tigoma lineata*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *atraria* Girard, 1856, as published in the binomen *Siboma atraria*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *lineata* Girard, 1856, as published in the binomen *Tigoma lineata* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2965

An application for the conservation of the specific name of *Siboma atraria* Girard, 1856 was received from Dr Carter R. Gilbert (*Florida Museum of Natural History, University of Florida, Gainesville, Florida, U.S.A.*) on 27 January 1995. After correspondence the case was published in BZN **52**: 324–327 (December 1995). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the application cited publication of Girard's (1856) paper from *Proceedings of the Academy of Natural Sciences of Philadelphia*, **8**: 165–213. The *Proceedings* were issued sometime between the date of acceptance of Girard's paper (30 September 1856) and 27 December 1856. The first publication of Girard's paper, however, was in September 1856 as a separate (as pointed out by Dr Reeve M. Bailey in a comment on Case 2808 published in BZN **51**: 262–263, September 1994). In this the paper has a slightly altered title (the words 'of America' are lacking) and different pagination (pp. 1–54), and has a list of species and an index (pp. 51–54) which are not found in the publication as it appeared in vol. 8 of the *Proceedings*.

Decision of the Commission

On 1 December 1996 the members of the Commission were invited to vote on the proposals published in BZN **52**: 325. At the close of the voting period on 1 March 1997 the votes were as follows:

Affirmative votes — 21: Bock, Brothers, Cocks, Dupuis, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Macpherson, Mahnert, Martins de Souza, Mawatari, Nielsen, Nye, Papp, Patterson, Savage, Schuster, Song, Štys

Negative votes — 1: Bouchet.

No votes were received from Cogger, Lehtinen and Minelli.

Ride was on leave of absence.

Bouchet commented: 'I approve the intention of the application to conserve the current usage of the specific name of *Gila atraria*. This could have been done simply

by setting aside the first reviser action of Evermann & Rutter (1895) (para. 5 of the application) and placing *Siboma atraria* on the Official List. I am opposed to placing on the Official Index *Tigoma lineata*, which is unambiguously defined by its type material'.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

atraria, *Siboma*, Girard, 1856, *Researches upon the cyprinoid fishes inhabiting the freshwaters of the United States west of the Mississippi Valley, from specimens in the museum of the Smithsonian Institution*, p. 44. (First issued as a separate in September 1856; published in the *Proceedings of Natural Sciences of Philadelphia*, **8**: 208 between 30 September and 27 December 1856).

lineata, *Tigoma*, Girard, 1856, *Researches upon the cyprinoid fishes inhabiting the freshwaters of the United States west of the Mississippi Valley, from specimens in the museum of the Smithsonian Institution*, p. 42. (First issued as a separate in September 1856; published in the *Proceedings of Natural Sciences of Philadelphia*, **8**: 206 between 30 September and 27 December 1856).

OPINION 1873

HEMIDACTYLIINI Hallowell, 1856 (Amphibia, Caudata): conserved

Keywords. Nomenclature; taxonomy; Amphibia; Caudata; HEMIDACTYLIINI; salamanders; *Hemidactylium*; North America.

Ruling

(1) Under the plenary powers the name *Mycetoglossus* Bonaparte, [1839] is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy, thereby invalidating the family-group name MYCETOGLOSSINI Bonaparte, 1850.

(2) The name *Hemidactylium* Tschudi, 1838 (gender: neuter), type species by monotypy *Salamandra scutata* Temminck & Schlegel, [1838], is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *scutata* Temminck & Schlegel, [1838], as published in the binomen *Salamandra scutata* (specific name of the type species of *Hemidactylium* Tschudi, 1838), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name HEMIDACTYLIINI Hallowell, 1856 (type genus *Hemidactylium* Tschudi, 1838) is hereby placed on the Official List of Family-Group Names in Zoology.

(5) The name *Mycetoglossus* Bonaparte, [1839] is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (a junior objective synonym of *Pseudotriton* Tschudi, 1838 and suppressed in (1) above).

(6) The name MYCETOGLOSSINI Bonaparte, 1850 is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology (invalid because the name of the type genus has been suppressed in (1) above).

History of Case 2869

An application for the conservation of the family-group name HEMIDACTYLIINI Hallowell, 1856 was received from Prof Hobart M. Smith (*University of Colorado, Boulder, Colorado, U.S.A.*) and Prof David B. Wake (*Museum of Vertebrate Zoology, University of California, Berkeley, California, U.S.A.*) on 17 November 1992. After correspondence the case was published in BZN **50**: 129–132 (June 1993). Notice of the case was sent to appropriate journals.

Comments in support from Dr Robert G. Webb (*University of Texas at El Paso, El Paso, Texas, U.S.A.*), Dr Harold A. Dundee (*Tulane University, New Orleans, Louisiana, U.S.A.*), Dr Mario García París (*Museo Nacional de Ciencias Naturales, Madrid, Spain*), Dr Merel J. Cox (*Bangkok, Thailand*), Dr Robert A. Thomas (*Society for Environmental Education, New Orleans, Louisiana, U.S.A.*), Dr David M. Hillis (*University of Texas, Austin, Texas, U.S.A.*), Prof Francis R. Cook (*Canadian Museum of Nature, Ontario, Canada*), Dr Hidetoshi Ota (*University of Ryukyus, Nishihara, Okinawa, Japan*) and Dr Paul Chippindale (*University of Texas, Austin, Texas, U.S.A.*) were published in BZN **51**: 153–156 (June 1994).

A note of support received from Prof Robert C. Stebbins (*University of California, Museum of Vertebrate Zoology, Berkeley, California, U.S.A.*), Dr Joseph T. Collins

(*University of Kansas, Museum of Natural History, Lawrence, Kansas, U.S.A.*), Dr James Lazell (*The Conservation Agency, Conanicut Island, Rhode Island, U.S.A.*), Dr Robert C. Drewes (*California Academy of Sciences, San Francisco, California, U.S.A.*), Dr Richard G. Zweifel (*American Museum of Natural History, New York, N.Y., U.S.A.*), Dr W.R. Branch (*Port Elizabeth Museum, Homewood, South Africa*), Dr David A. Good (*Louisiana State University, Museum of Natural Science, Baton Rouge, Louisiana, U.S.A.*) and Dr Robert F. Inger (*Field Museum of Natural History, Chicago, Illinois, U.S.A.*) was also published in BZN **51**: 156.

An opposing comment from Prof Alain Dubois (*Muséum National d'Histoire Naturelle, Paris, France*) was published in BZN **51**: 264–265 (September 1994). A reply from the authors of the application was published in BZN **51**: 341 342 (December 1994).

A further opposing comment from Prof Dubois was published in BZN **52**: 337 338 (December 1995); a reply by the authors of the application was published in BZN **53**: 48–49 (March 1996).

Decision of the Commission

On 1 December 1996 the members of the Commission were invited to vote on the proposals published in BZN **50**: 131. At the close of the voting period on 1 March 1997 the votes were as follows:

Affirmative votes — 18: Bock, Brothers, Cocks, Eschmeyer, Heppell, Kerzhner, Kraus, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Nye, Papp, Savage, Schuster, Song

Negative votes — 5: Bouchet, Kabata, Lehtinen, Patterson and Štys.

Dupuis abstained.

No vote was received from Cogger.

Ride was on leave of absence.

Voting against, Bouchet commented: 'The name HEMIDACTYLIINI had been used in only 10 publications when Dubois (1984) resurrected the name MYCETOGLOSSINI. Priority should have been applied in this case for the past 13 years'. Abstaining, Dupuis commented: 'I refuse to vote on this case because in my personal view the time between the last comment and the distribution of voting papers was too short. The last comment was less than one year old'. [*Editorial note*. The comment was from the authors of the application. An explanation of procedure followed in sending cases for voting was given in BZN **54**: 53–54, March 1997].

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

HEMIDACTYLIINI Hallowell, 1856, *Proceedings of the Academy of Natural Sciences of Philadelphia*, **8**: 11.

Hemidactylium Tschudi, 1838, *Mémoires de la Société des Sciences Naturelles de Neuchâtel*, **2**: 94.

MYCETOGLOSSINI Bonaparte, 1850, *Conspectus systematum*, Classis IV (Amphibia), no. 27.

Mycetoglossus Bonaparte, [1839], *Iconografia della fauna Italica per le quattro classi degli animali vertebrati*, vol. 2 (Amfibi), Generi Salamandrini, no. 13.

scutata, *Salamandra*, Temminck & Schlegel, [1838], *in* Siebold, P.F. de, *Fauna Japonica ... annis 1823–1830 collegit*. Reptilia Elaborantibus, p. 119.

OPINION 1874

Aptornis Owen, 1848 (Aves): conserved as the correct original spelling

Keywords. Nomenclature; taxonomy; Aves; extinct flightless birds; APTORNITHIDAE; *Aptornis*; New Zealand.

Ruling

(1) Under the plenary powers it is hereby ruled that the correct original spelling of the generic name *Apterornis* Owen, 1848 is *Aptornis*.

(2) The name *Aptornis* Owen, 1848 (gender: masculine), type species by monotypy *Dinornis otidiformis* Owen, 1844, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *otidiformis* Owen, 1844, as published in the binomen *Dinornis otidiformis* (specific name of the type species of *Aptornis* Owen, 1848), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name APTORNITHIDAE Bonaparte, 1856 (type genus *Aptornis* Owen, 1848) is hereby placed on the Official List of Family-Group Names in Zoology.

(5) The name *Apterornis* Owen, 1848 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (ruled in (1) above to be an incorrect original spelling of *Aptornis* Owen, 1848).

History of Case 2879

An application for the conservation of *Aptornis* Owen, 1848 as the correct original spelling of the generic name first published as *Apterornis* was received from Dr Erich Weber (*Eberhard-Karls-Universität, Zoologisches Institut, Tübingen, Germany*) and Dr Frank-Thorsten Krell (*Theodor-Boveri-Institut für Biowissenschaften der Universität, Würzburg, Germany*) on 16 February 1993. After correspondence the case was published in BZN **52**: 170–174 (June 1995). Notice of the case was sent to appropriate journals.

Comments in support from Dr B.J. Gill (*Auckland Institute & Museum, Auckland, New Zealand*) on behalf of the Checklist Committee of the Ornithological Society of New Zealand, and from Prof Walter J. Bock (*Columbia University, New York, N.Y., U.S.A.*), were published in BZN **52**: 346–347 (December 1995). In his comment Prof Bock proposed (BZN **52**: 347) that the family-group name APTORNITHIDAE Bonaparte, 1856 be placed on the Official List in addition to the names recorded in para. 8(2) and (3) on BZN **52**: 172. This additional proposal was included on the voting paper.

Decision of the Commission

On 16 September 1996 the members of the Commission were invited to vote on the proposals published in BZN **52**: 172, with the addition of the proposed placement of the family-group name APTORNITHIDAE Bonaparte, 1856 on the Official List published on BZN **52**: 347. At the close of the voting period on 16 December 1996 the votes were as follows:

Affirmative votes 24: Bock, Bouchet, Brothers, Cocks, Cogger, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Nye, Papp, Patterson, Savage, Schuster, Song, Štys

Negative votes — none.

Dupuis abstained.

Ride was on leave of absence.

Dupuis commented: 'I refuse to vote on this case because in my personal view the time between the last comment and the distribution of voting papers was too short. The last comment was less than one year old'. [*Editorial note*. The comment was one of support. An explanation of procedure followed in sending cases for voting was given in BZN **54**: 53–54, March 1997].

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Apterornis Owen, 1848. *Proceedings of the Zoological Society of London*, **16**: 1 (an incorrect original spelling of *Aptornis* Owen, 1848).

Aptornis Owen, 1848. *Proceedings of the Zoological Society of London*, **16**: 1 (incorrectly spelt as *Apterornis*).

APTORNITHIDAE Bonaparte, 1856, *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences*, Paris, **43**: 109.

otidiformis, *Dinornis*, Owen, 1844, *Transactions of the Zoological Society of London*, **3**(3): 247.

INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; manuscripts not prepared in accordance with these guidelines may be returned.

General. Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat applications on this basis. Applicants are advised to discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described . . .'. The Abstract will be prepared by the Secretariat.

References. These should be given for all authors cited. Where possible, ten or more relatively recent references should be given illustrating the usage of names which are to be conserved or given precedence over older names. The title of periodicals should be in full and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages and plates, the publisher and place of publication.

Submission of Application. Two copies should be sent to: The Executive Secretary, The International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time that it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in IBM PC compatible format, preferably in ASCII text. It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

On the proposed conservation of usage of 15 mammal specific names based on wild species which are antedated by or contemporary with those based on domestic animals. R. Pellew; E.C. Mungall; A. Sforzi; P. Wyrost; R. Schodde; W.J. Bock; A.L. Gardner; C.O. Handley, Jr.; A. Gentry, J. Clutton-Brock & C.P. Groves . 119

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 54, part 3 (pp. 145–208) 30 September 1997

Notices

(a) *Invitation to comment*. The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles*. At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications*. The following new applications have been received since going to press for volume 54, part 2 (published on 30 June 1997). Under Article 80 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

(1) *Papilio sylvanus* Esper, [1778] (currently *Ochlodes sylvanus*; Insecta, Lepidoptera): proposed conservation of the specific name. (Case 3046). A.L. Devyatkin.

(2) *Holospira* Martens, 1860 (Mollusca, Gastropoda): proposed designation of *Cylindrella goldfussi* Menke, 1847 as the type species. (Case 3047). F.G. Thompson.

(3) NYMPHULINAE Duponchel, [1845] (Insecta, Lepidoptera): proposed precedence over ACENTROPINAE Stephens, 1836. (Case 3048). M.A. Solis.

(4) *Cnemidiphorus neomexicanus* Lowe & Zweifel, 1952 (Reptilia, Squamata): proposed conservation of the specific name. (Case 3049). H.M. Smith, H.L. Taylor, J.M. Walker, R.W. Axtell, S.J. Beaupre, D. Chiszar, J.E. Cordes, J.A. Lemos-Espinal, A.H. Price, F. van Breukelen & R.G. Zweifel.

(5) *Pachylops* Fieber, 1858 (Insecta, Heteroptera): proposed designation of *Capsus chloropterus* Kirschbaum, 1856 (currently *Orthotylus virescens* (Douglas & Scott, 1865)) as the type species. (Case 3050). A. Carapezza & I.M. Kerzhner.

(6) *Sphaerius* Waltl, 1838 and SPHAERIUSIDAE Erichson, 1845 (Insecta, Coleoptera): proposed conservation by the partial revocation of Opinion 1331. (Case 3052). M.A. Jäch.

(d) *Rulings of the Commission.* Each Opinion published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin.*

The International Commission on Zoological Nomenclature — electronic information

Regularly updated information about the Commission is available on the World Wide Web at http://www.iczn.org.

The International Code of Zoological Nomenclature

The new (4th) edition of the International Code of Zoological Nomenclature will be published in 1998. Meanwhile, copies of the 3rd edition (published 1985) are still available. Copies may be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk) *or* A.A.Z.N., Attn. Dr D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560, U.S.A. (e-mail: smithd@nmnh.si.edu).

The cost is £19 or $35 (including surface postage); members of the American and European Associations for Zoological Nomenclature are offered the reduced price of £15 or $29. Payment (cheques made out to 'ITZN' or 'AAZN') should accompany orders or should follow if the order is made by electronic means.

Towards Stability in the Names of Animals

The International Commission on Zoological Nomenclature was founded on 18 September 1895. In recognition of its Centenary a history of the development of nomenclature since the 18th century and of the Commission has been published entitled '*Towards Stability in the Names of Animals — a History of the International Commission on Zoological Nomenclature 1895–1995*' (ISBN 0 85301 005 6). It is 104 pages (250 x 174 mm) with 18 full-page illustrations, 14 being of eminent zoologists who played a crucial part in the evolution of the system of animal nomenclature as universally accepted today. The book contains a list of all the Commissioners from 1895 to 1995. The main text was written by R.V. Melville (former Secretary of the Commission) and has been completed and updated following his death.

Copies may be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk) *or* A.A.Z.N., Attn. Dr D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560, U.S.A. (e-mail: smithd@nmnh.si.edu).

The cost is £30 or $50 (including surface postage); members of the American and European Associations for Zoological Nomenclature are offered the reduced price of £20 or $35. Payment (cheques made out to 'ITZN' or 'AAZN') should accompany orders or should follow if the order is made by electronic means.

Official Lists and Indexes of Names and Works in Zoology

The Official Lists and Indexes of Names and Works in Zoology was published in 1987. This book gives details of all the names and works (about 9,900) on which the Commission has ruled since it was set up in 1895, up to 1985. A supplement giving the 946 names and five works added in the five years up to 1990 is also available.

Copies may be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk) *or* A.A.Z.N., Attn. Dr D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560, U.S.A. (e-mail: smithd@nmnh.si.edu).

The cost is £60 or $110 (including surface postage); members of the American and European Associations for Zoological Nomenclature are offered the reduced price of £40 or $75. Payment (cheques made out to 'ITZN' or 'AAZN') should accompany orders or should follow if the order is made by electronic means.

The European Association for Zoological Nomenclature

The European Association for Zoological Nomenclature (EAZN) was set up in 1992 to facilitate liaison between European zoologists and the Commission, and to provide support for the Commission. An Inaugural Council under the Presidency of Dr V. Mahnert (Switzerland) and with Dr E. Macpherson (Spain) as Secretary and Dr M.A. Alonso-Zarazaga (Spain) as Treasurer launched EAZN; their dedicated work is gratefully acknowledged.

A new Council has now been established with Dr W. Böhme (Museum Alexander Koenig, Bonn, Germany) as President and Dr Ch. Kropf (Natural History Museum, Berne, Switzerland) as Secretary.

The aims of the EAZN can be set out as follows:

(1) to facilitate the work of the Commission by providing funds;
(2) to promote liaison between the zoological community and the Commission;
(3) to promote and compile works relevant to zoological nomenclature;
(4) to disseminate information on zoological nomenclature to those institutions, organisations and individuals requesting it.

Europe has a great and long tradition in zoological systematics, and European scientists generate much of the Commission's important work. All European zoologists, and those who use scientific names of animals, are invited to support the Commission by joining EAZN. The annual membership is set at the equivalent of £20 for individuals and £40 for institutions. Members will receive a Newsletter which will be issued at least annually, and more often if required. They also benefit from considerable reductions in the price of the Commission's publications – the *Code*, the *Official Lists and Indexes of Names and Works in Zoology*, and the 1995 Centenary History entitled *Towards Stability in the Names of Animals*.

For further information, please contact: Dr Ch. Kropf, Natural History Museum, Bernastrasse 15, CH-3005 Berne, Switzerland (Phone: +31 350 7260; Fax: +31 350 7499; e-mail: chkropf@nmbe.unibe.ch).

Case 3013

Helix draparnaudi Beck, 1837 (currently *Oxychilus draparnaudi*; Mollusca, Gastropoda): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of *Oxychilus draparnaudi* (Beck, 1837), a common and widely distributed European land snail (family ZONITIDAE). The name (with spelling 'corrected' from the original *draparnaldi*) was placed on the Official List of Specific Names in Opinion 336 (1955), but the original combination is there given wrongly as *Helicella draparnaudi*. In the actual combination with *Helix*, Beck's name is a junior primary homonym of *H. draparnaudi* Sheppard, 1823 and (in its original spelling) of *H. draparnaldi* Cuvier, 1816. Sheppard's name is a doubtful and disused synonym in the water snail family PLANORBIDAE while Cuvier's is a junior objective synonym of *Phenacolimax major* (Férussac, 1807); the suppression of both these names is proposed.

Keywords. Nomenclature; taxonomy; Gastropoda; ZONITIDAE; *Oxychilus draparnaudi*.

---

1. Beck (1837, p. 6) introduced the nominal species *Helix (Helicella) Draparnaldi*. The specific name was based on that of the French naturalist J.P.R. Draparnaud and its long established emendation to *draparnaudi* was accepted in Opinion 336 (1955; see point 9 of para. 10) as the correct [under the then current rules] original spelling; although the change would not be valid under the present Code (Article 57f) the ruling in the Opinion still stands. The species is now known as *Oxychilus draparnaudi*.

2. Beck's species was divided into two parts:

'a. *gallica*. Drp. VIII, 23–5. Gall. *H. nitida*. Drp. sec. Michaud! — *H. cellaria* Fer!'

'b. *italica* — *H. cellaria* var. Rossm. Rossm. 22*. Ital. bor.'. The terms '*gallica*' and '*italica*' refer to regional variants of Beck's *H. draparnaudi* concept and neither has been made available as a subspecific name. Although no description of *H. draparnaudi* was published in 1837 the two indications make the name available; pl. 8, figs. 23–25 of Draparnaud (1805) showed so-called '*Helix nitida*' (see para. 3 below), and pl. 1, fig. 22* of Rossmässler (1835) depicted a variety of *H. cellaria* Müller, 1774 (now *Oxychilus cellarius*). Beck published a description of *H. draparnaldi* [sic] in 1838 on p. 7 of his appendix entitled *Specierum novarum*.

3. The identity of *H. nitida* sensu Draparnaud (1805) caused much confusion (see Taylor, 1907) until Moquin-Tandon ([1856]) realised the correct situation. This is because the meanings of this name and of *H. lucida* were exchanged in Draparnaud's books of 1801 and 1805; thus *H. nitida* sensu 1805 (p. 117, no. 54) [= *Oxychilus draparnaudi* (Beck, 1837)] is the *H. lucida* of 1801 (p. 96, no. 46), and vice versa. In

1801 (p. 96, no. 47) Draparnaud had used *H. nitida* in the correct sense, that of Müller (1774); this Holarctic species is now known as *Zonitoides nitidus* (Müller, 1774) and is the type species of *Zonitoides* Lehmann, 1862.

4. Following the clarification by Moquin-Tandon ([1856]) of the synonymy between *Helix lucida* Draparnaud, 1801, '*H. nitida*' Draparnaud, 1805 and *H. draparnaudi* Beck, 1837 the name *H. lucida* became that most commonly used for the taxon. Kennard & Woodward (1926a, p. 173; 1926b, p. 39) realized that *H. lucida* Draparnaud, 1801 is a junior primary homonym of *H. lucida* Pulteney, 1799 (p. 47), a name which is indeterminate and not in use (see Kennard & Woodward, 1926b, p. 39). Because of this homonymy Kennard & Woodward adopted Beck's specific name *draparnaudi*; the usage of *lucida* Draparnaud, 1801 nevertheless continued for some time.

5. Ellis (1951) submitted an application to the Commission for the placement of 124 mollusc specific names on the Official List. One of the names submitted by Ellis was *draparnaudi* Beck, 1837, and together with 121 others it was placed on the List in Opinion 336 (1955). However, that Opinion (and consequently the Official Lists published in consolidated form in 1987: see p. 223) contains an error, since *draparnaudi* is shown as having been published in the binomen *Helicella draparnaudi* whereas it was actually published in combination with *Helix* (see para. 7 below). This error has consequences, since *Helix draparnaudi* Beck, 1837 is a junior primary homonym of *H. draparnaudi* Sheppard, 1823 (p. 158), and in its original form *draparnaldi* [para. 1 above] of *H. draparnaldi* Cuvier, 1816 (p. 405, footnote 5). The names *H. (Cochlodina) draparnaudi* Férussac, 1821 and *H. draparnaldi* De Serres, 1827 also exist but are nomina nuda.

6. *H. draparnaldi* Cuvier, 1816 was a replacement name for *Vitrina pellucida* sensu Draparnaud (1805, pl. 8, figs. 34–37) non Müller, 1774 (see Forcart, 1946, p. 652), and as such it is a junior objective synonym of the earlier replacement name *Helicolimax major* A. Férussac in J. Férussac, 1807 (p. 43), now *Phenacolimax major*. This Férussac name was among those placed on the Official List in Opinion 336 together with *draparnaudi* Beck. Sheppard (1823, p. 158) described a species *Helix draparnaudi* on the basis of two specimens collected from a mill-pond at Holbrook, Suffolk, England. The description does not enable certain identification and there has been doubt as to the identity of Sheppard's nominal species (Kennard & Woodward, 1926a, b; Germain, 1931). Jeffreys (1830, p. 386) placed it in *Planorbis* and Gray (1840) treated Sheppard's name as a synonym of *P. marginatus* (Draparnaud, 1805), now considered the same as *P. planorbis* (Linnaeus, 1758). Moquin-Tandon ([1856], p. 428) regarded it as a junior synonym of *Helix complanata* Linnaeus, 1758 but he misidentified the latter name and was using it in the taxonomic sense of *P. planorbis*. Sheppard's specific name has not been applied as valid to any taxon since Germain (1922, p. 109) used it in a catalogue as *Planorbis draparnaudi*, although citing Jeffreys (1830) as the author.

7. In 1837 Beck (p. 6) published his name *Draparnaldi* in the form '*H. Draparnaldi*'. Although here the initial *H.* stood for *Helicella*, at the top of the page *Helicella* was given as a subgenus of *Helix*, and other subgenera (e.g. *Helix (Mesomphix)*) were treated in the same way. Kennard & Woodward (1926a, p. 40) said that 'with Beck, however, subgenera were the equivalent of the genera of other authors', but this is merely a taxonomic view and Beck's name is a junior primary

homonym of Sheppard's (and, as at first spelled, of Cuvier's), since subgeneric placement is irrelevant under Article 57d of the Code.

8. The specific name of *Oxychilus draparnaudi* (Beck, 1837) is well-known and is extensively and consistently used to denote a common and widespread species. It appears in important faunal reports, handbooks and guides (a list of 24 of these has been given to the Commission Secretariat), and also in hundreds of specialist papers devoted to faunistics, taxonomy and ecology of land snails. It would be entirely wrong to change the name on the grounds that it was a junior primary homonym of the indeterminate and disused planorbid name *Helix draparnaudi* Sheppard, 1823 or of *H. draparnaldi* Cuvier, 1816, a junior objective synonym of *Phenacolimax major* (Férussac, 1807). We propose that Beck's name be unambiguously conserved.

9. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the following specific names for the purposes of both the Principle of Priority and the Principle of Homonymy:
   (a) *draparnaldi* Cuvier, 1816, as published in the binomen *Helix draparnaldi*;
   (b) *draparnaudi* Sheppard, 1823, as published in the binomen *Helix draparnaudi*, and all other uses of the names *draparnaldi* and *draparnaudi* published in combination with *Helix* before the publication of *Helix draparnaldi* Beck, 1837 (corrected in Opinion 336 to *H. draparnaudi*);

(2) to correct the entries for the names *draparnaudi* and *draparnaldi* Beck, 1837 on the Official List and the Official Index of Specific Names in Zoology to record the fact that the original generic combination was with *Helix* and not with *Helicella*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
   (a) *draparnaldi* Cuvier, 1816, as published in the binomen *Helix draparnaldi* and as suppressed in (1)(a) above;
   (b) *draparnaudi* Sheppard, 1823, as published in the binomen *Helix draparnaudi* and as suppressed in (1)(b) above.

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Case 2954

Suchonella Spizharsky, 1937 (Crustacea, Ostracoda): proposed designation of *S. typica* Spizharsky, 1939 as the type species

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Abstract. The purpose of this application is to stabilise the usage of the name *Suchonella* Spizharsky, 1937 (superfamily SUCHONELLOIDEA Mischina, 1972) for a genus of Late Permian and Triassic ostracods by the designation of *Suchonella typica* Spizharsky, 1939 as the type species. At present the nominal species *S. malachovi* Spizharsky, 1937 is the type but this was described on a young instar which lacked the diagnostic features of the genus as described in 1937 and as currently understood.

Keywords. Nomenclature; taxonomy; Crustacea; Ostracoda; SUCHONELLOIDEA; Permian; Triassic; *Suchonella*; *Suchonella malachovi*; *Suchonella typica*.

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1. Spizharsky (1937, p. 159) described the new ostracod genus *Suchonella* from the Kolchugino Series of the Kuznetsk Basin, along the Tom River in northern Russia. The deposits were laid down in a closed brackish water basin and are of Upper Permian to Triassic age. The genus included three new taxa, *Suchonella typica*, *S.* cf. *typica* and *S. malachovi*. The first of these was indicated as the type species but there was no description and the name was thus a nomen nudum. The second (p. 159, pl. 1, fig. 22) referred to an unnamed species that is unavailable as the type species. *Suchonella malachovi* was described and illustrated (p. 160, pl. 1, figs. 23–26) and since it is the only included species cited by an available name it is the type of *Suchonella* by monotypy. Spizharsky's name has been romanized by himself and others as Spizharskyi, Spizharski and Spizharskiy.

2. *Suchonella malachovi* Spizharsky, 1937 was described from a young instar and therefore lacks the diagnostic features of *Suchonella* as described by Spizharsky in 1937. In particular, there in no wide posterior end, spine or sulcus. The type locality and whereabouts of the type specimen were not stated; the specimen is possibly in the collections of the Central Scientific Research Geological–Prospecting Institute (see Ellis & Messina, 1981). The lack of information on *Suchonella* as defined by *malachovi* is apparent in the publications by Schneider (1948), Belousova (1963) and Lyutevitch (1967), in which there is no mention of the spine or sulcus. Ellis & Messina (1981) cited *S. malachovi* as the type species by monotypy of *Suchonella* and noted that Swain's (1961) designation of *S. typica* as the type was invalid.

3. In 1939 Spizharsky redescribed (pp. 193–194) *Suchonella* and redescribed and re-illustrated (p. 194, pl. 46, fig. 11) *S. malachovi*. He also described and illustrated (p. 194, pl. 46, fig. 6) *S. typica* for the first time, referring to this taxon as 'Spizharsky, in litt.'. The specific name of *typica* became available from this publication. The type material is from the Permian Northern Dvina Beds, recovered from the village of Aristovo in northern European Russia. The figured specimen is housed in the collections of the Central Geological Museum, St Petersburg.

4. With the exception of Ellis & Messina in 1981 (para. 2 above), all those who have published on *Suchonella* since 1939 have considered the type species of the genus to be *S. typica* and Swain (1961), Howe (1962), Kemp (1980), Molostovskaya (1980, 1990) and Sohn (1987, 1997), for example, have cited, albeit incorrectly, *S. typica* as the type. The concept of *Suchonella* cannot be defined through its current type species, *S. malachovi*, because the type specimen is immature and lacks diagnostic features. We propose that *S. typica* be designated the type species, in accord with the current understanding and usage of the majority of authors. *Suchonella* is the basis of the suprageneric categories SUCHONELLIDAE and SUCHONELLOIDEA (= Suchonellacea) Mischina, 1972.

5. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous type fixations for the nominal genus *Suchonella* Spizharsky, 1937 and to designate *Suchonella typica* Spizharsky, 1939 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Suchonella* Spizharsky, 1937 (gender: feminine), type species by designation in (1) above *Suchonella typica* Spizharsky, 1939;

(3) to place on the Official List of Specific Names in Zoology the name *typica* Spizharsky, 1939, as published in the binomen *Suchonella typica* (specific name of the type species of *Suchonella* Spizharsky, 1937).

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Case 3002

Papilio camillus Fabricius, 1781 (currently *Cyrestis camillus*) and *Limenitis reducta* Staudinger, 1901 (Insecta, Lepidoptera): proposed conservation of the specific names

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Abstract. The main purpose of this application is to conserve the specific name of *Cyrestis camillus* (Fabricius, 1781) for one of the most distinctive of African butterflies, known as the African map butterfly or African porcelain (family NYMPHALIDAE). The name has been in use for this taxon for more than 200 years but it is a junior primary homonym of *Papilio camillus* Cramer, [1780], an invalid name for a West African blue butterfly (family LYCAENIDAE). The specific name of the latter taxon has been known as *isis* Drury, 1773 for more than 150 years; the taxon has been placed in various genera and is currently known as *Azanus isis*. It is also proposed that the specific name of *Limenitis reducta* Staudinger, 1901 (family NYMPHALIDAE) be conserved for the butterfly known as the Southern White Admiral, which ranges from southwest Europe to Iran. The name *reducta* was placed on the Official List in Opinion 562 (April 1959); however, the senior subjective synonym *Papilio sibilla* Linnaeus, 1767 (previously used in a misidentified sense) was not then suppressed, and this is now proposed.

Keywords. Nomenclature; taxonomy; Lepidoptera; butterflies; NYMPHALIDAE; LYCAENIDAE; *Azanus isis*; *Cyrestis camillus*; *Limenitis reducta*.

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1. Cramer ([1780], p. 20, pl. 300, figs. A and B) established the specific name of *Papilio camillus* for a blue butterfly from Sierra Leone (family LYCAENIDAE). The dates of publication of the parts of Cramer & Stoll's work were set out in Opinion 516 (May 1958). *P. camillus* was immediately considered to be a junior subjective synonym of *Papilio isis* Drury, 1773 (p. 6, pl. 3, figs. 4 and 5, index), also described from Sierra Leone (see, for example, Karsch, 1893). The taxon has been placed in various genera and is now included in *Azanus* Moore, 1881 (see Stempffer, 1967, p. 252). The specific name *isis* has been unambiguously used in African butterfly literature for more than 150 years, whilst the name *camillus* Cramer has been used only in the occasional synonymic list.

2. Fabricius (1781, p. 11) established the name *Papilio camillus* for one of the most distinctive and characteristic of African butterflies (family NYMPHALIDAE). In his description Fabricius referred to 'Mus. Dom. Banks' and a specimen of the species is present in the Joseph Banks collection in the Lepidoptera section of the Natural History Museum, London. The taxon has been included in the genus *Cyrestis* Boisduval, 1832 since this was established, and the combination *Cyrestis camillus* has been consistently used in publications on African butterflies. With two exceptions the specific name *camillus* has been applied to Fabricius's species for more than 200

years. Koçak (1983, p. 39) recorded *P. camillus* Fabricius as a junior homonym of *P. camilla* Linnaeus, 1764 (but see para. 4 below) and stated that *P. pantheus* Drury, 1782 (pp. 7 8, pl. 6, fig. 4, index; described from Sierra Leone) was the valid name for the taxon. In a recent work on the butterflies of southern Africa, Pringle, Henning & Ball (1994, p. 111, pl. 99, fig. 205a) noted that this taxon was 'previously known as *camillus* Fabricius, [but] this name is apparently invalid'; citing Koçak, they regrettably adopted the name *Cyrestis* (*Azania*) *pantheus* (Drury, 1782).

3. The name *Papilio camillus* Fabricius, 1781 is a junior primary homonym of *Papilio camillus* Cramer, [1780] but, since *camillus* Fabricius has been unambiguously used for more than 200 years and *camillus* Cramer has remained unused, it would cause much confusion and serve no purpose to follow priority in this case. *Papilio pantheus* Drury, 1782 is the next available name for Fabricius's taxon but, with the exceptions noted above, it has not been used. Recent publications in which *camillus* Fabricius has been used include D'Abrera (1980, p. 248), Berger (1981, p. 172), Kielland (1990, p. 130), Larsen (1991, p. 332) and Ackery, Smith & Vane-Wright (1995, p. 363). A representative list of a further 19 publications in which the name *camillus* Fabricius has been adopted, by 17 different authors and dating from 1862 to 1993, is held by the Commission Secretariat. The references are all listed in Ackery et al. (1995).

4. Koçak (1983) recorded *Papilio camillus* Fabricius, 1781 as invalid (para. 2 above) because he considered the name to be a junior primary homonym of *Papilio camilla* Linnaeus, 1764 (p. 304). This is incorrect; *camillus* and *camilla* are Latin nouns, meaning a freeborn youth (masculine) and a freeborn maiden (feminine) respectively (see Brown, 1979, pp. 181, 199), and their spellings do not change according to the gender of the generic name (Articles 31b(1) and 31b(ii) of the Code). They are not homonyms. Moore ([1898], pp. 146, 174; see Sherborn, 1901 for the date of publication) designated *P. camilla* Linnaeus, 1764 as the type species of the new genus *Ladoga*; the species (known in English as the White Admiral) is currently included either in this genus or in *Limenitis* Fabricius, 1807.

5. The name *Papilio camilla* Linnaeus, 1764 was placed on the Official List in Opinion 562 (April 1959; incorrectly recorded with the date '1763'). At the same time the name *Limenitis reducta* Staudinger, 1901 (in Staudinger & Rebel, p. 22; published as *L. camilla* var. *reducta*) was placed on the Official List; it is the name currently in use for a more southern species known as the Southern White Admiral which ranges from southwest Europe to Iran. Opinion 562 recorded that shortly after its (1764) publication, *P. camilla* was abandoned by Linnaeus, and that in 1767 he renamed the species as *P. sibilla*. However, this is not the case; inspection of the *Systema Naturae*, Ed. 12 (p. 781) shows that Linnaeus retained *camilla* in its original (1764) sense for the northern taxon and introduced the name *sibilla* for the more southern species. Subsequently Denis & Schiffermüller (1775, p. 172) switched the meanings of the names *camilla* and *sibilla* (spelt '*sibylla*') and these usages were maintained in the genus *Limenitis* until the beginning of the 20th century when *camilla* was revived for the northern species. Linnaeus (1767) had included in *Papilio sibilla* the (senior) synonym *P. rivularis* Scopoli, 1763 (p. 165, fig. 443) and the latter specific name was generally used as valid for a number of years for the southern species. Higgins (1933, p. 60), however, demonstrated that *rivularis* was a senior synonym, and hence the valid specific name, of *Papilio lucilla* Denis & Schiffermüller, 1775 (p. 173), the type

species of *Paraneptis* Moore, [1898] (p. 146). The name *Limenitis reducta* Staudinger, 1901 became accepted for the Southern White Admiral, following the suggestion of Hemming (1934, p. 2). Because of the misinformation on Linnaeus's (1767) nomenclatural actions, in placing the name *reducta* on the Official List in 1959 the earlier name for the taxon, *Papilio sibilla* Linnaeus, 1767, was not suppressed; it is now proposed that this be done to ensure the continued unambiguous use of *reducta* for the more southern species. This name has been consistently used for the taxon in publications for more than 50 years (see, for example, Higgins & Riley, 1970, p. 79, pl. 16; Larsen, 1974, p. 111; Feltwell, 1993, p. 176; and Hesselbarth, van Oorschot & Wagener, 1995, p. 978).

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the following specific names:
   (a) *camillus* Cramer, [1780], as published in the binomen *Papilio camillus*, and all uses of that name prior to the publication of *Papilio camillus* Fabricius, 1781, for the purposes of both the Principle of Priority and the Principle of Homonymy;
   (b) *sibilla* Linnaeus, 1767, as published in the binomen *Papilio sibilla*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Specific Names in Zoology the name *camillus* Fabricius, 1781, as published in the binomen *Papilio camillus*;

(3) to add to the entry on the Official List of Specific Names in Zoology for *reducta* Staudinger, 1901, as published in the trinomen *Limenitis camilla reducta*, a record of the ruling in the present case;

(4) to emend the entry on the Official List of Specific Names in Zoology for the specific name of *Papilio camilla* Linnaeus to record the date of publication as 1764 and to record that it is the type species of *Ladoga* Moore, [1898];

(5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
   (a) *camillus* Cramer, [1780], as published in the binomen *Papilio camillus* and as suppressed in (1)(a) above;
   (b) *sibilla* Linnaeus, 1767, as published in the binomen *Papilio sibilla* and as suppressed in (1)(b) above.

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Case 3001

Lactura Walker, 1854 (Insecta, Lepidoptera): proposed conservation, and proposed conservation of the specific name of *Eustixis pupula* Hübner, [1831] (currently *Lactura pupula*)

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Abstract. The main purpose of this application is to conserve the widely used name *Lactura* Walker, 1854 for a genus of moths (Microlepidoptera, superfamily ZYGAENOIDEA), now the type genus of the family LACTURIDAE Heppner, 1995. *Lactura* is a junior subjective synonym of *Eustixis* Hübner, [1831]; it is also technically junior to the simultaneously published synonym *Mieza* Walker, 1854, and the suppression of both these long disused names is proposed. The nominal species *Eustixia pupula* and *Eustixis pupula* were established with Hübner's authorship in 1823 and [1831] respectively, probably due to error since they referred to entirely different moths; it is proposed that the established usage of the North American *Eustixia pupula* (1823; PYRALIDAE) and *Lactura pupula* ([1831]; LACTURIDAE) should be maintained.

Keywords. Nomenclature; taxonomy; Lepidoptera; Microlepidoptera; LACTURIDAE; YPONOMEUTIDAE; PYRALIDAE; *Lactura*; *Lactura pupula*; *Eustixia*; *Eustixia pupula*; *Eustixis*; *Mieza*.

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1. Walker (1854, p. 485) described the new genus *Lactura* for the single new species *L. dives* from 'New Holland' (actually the Bismarck Islands, near New Guinea).

2. Hübner (1823) described (p. 24, species 164) and illustrated (figs. 327, 328) a pyralid moth *Eustixia pupula* from Savannah (Georgia, U.S.A.); this was designated the type species of *Eustixia* by Kirby (1892, p. 339). The genus and species are both accepted as valid in the family PYRALIDAE (see for example Walker, 1854, p. 522; McDunnough, 1939, p. 17; Hodges et al., 1983, p. 68).

3. Notwithstanding the publication in 1823 of *Eustixia pupula*, as mentioned in the preceding paragraph, a few years later another species (no. 245) from Georgia was called *Eustixis pupula*; the name, description and illustrations were published after Hübner's death (Hübner, [1827–1831], p. 24 and figs. 489 and 490; for the dates of Hübner's works see Hemming (1937)). Under Article 21 of the Code the date of publication of *Eustixis pupula* (see Hemming, 1937, vol. 1, p. 456) is taken as [1831]. This species was designated as the type species of *Eustixis* by Grote (1875, p. 152).

4. The descriptions of *Eustixia pupula* (1823) and *Eustixis pupula* ([1831]) were not the same, although both included the phrase 'Phalaena vera, Lithosia geometriformis', and the localities are in effect identical. However, the illustrations were of completely different moths which could not have been considered congeneric even in Hübner's time, and presumably the treatment of the species and the slight

change of spelling of the generic name were due to error. Whether or not this is so, the names *Eustixia pupula* and *Eustixis pupula* are both available and this has caused confusion.

5. *Eustixis pupula* Hübner, [1831] is congeneric with *Lactura dives* Walker, 1854 (para. 1 above). Its generic name *Eustixis* has scarcely been used as valid, the last instance being Grote (1875), and has not been associated with *Lactura* (or the synonym *Mieza* Walker, 1854, p. 527; see para. 5 below) since the time of Walsingham (1914, p. 325) and Meyrick (1914, p. 33). References for the use of *Lactura pupula* include Forbes (1930, p. 98), McDunnough (1939, p. 90), Kimball (1965, p. 292), Watson, Whalley & Duckworth (1975, p. 227), Hodges et al. (1983, p. 27), Covell (1984, p. 431), Heppner (1984, p. 56; 1995a, p. 118) and Common (1990, p. 298). *Lactura* has been placed in the microlepidoptera family YPONOMEUTIDAE (formerly spelled HYPONOMEUTIDAE), but I (Heppner, 1995b, p. 146) have treated it as the type genus of a separate family LACTURIDAE.

6. In the same work in which he published *Lactura* on p. 485, Walker (1854) established the genus *Mieza* on p. 527. Two nominal species were placed in the latter genus, the new *M. igninix* and *Eustixis laeta* Geyer, 1832; both these names are subjective synonyms of *Eustixis pupula* Hübner, [1831], as mentioned by Walsingham (1914, pp. 193 and 325) and Nye & Fletcher (1991, p. 126), so *Lactura* and *Mieza* are subjective synonyms. Although Walsingham (1914) used *Mieza* (when rejecting *Eustixis* because of its supposed homonymy with *Eustixia*) rather than *Lactura*, all subsequent authors have used *Lactura* (originally on grounds of page priority in Walker, 1854). Although Walsingham's action constitutes a First Reviser action under Article 24 of the Code, adoption now of *Mieza* would be confusing, especially since this long-disused name has never been applied to any Old World species, and I propose that it be suppressed.

7. The adoption of *Eustixis* Hübner, [1831] in place of *Lactura* Walker, 1854 would deprive us of the latter well-known generic name, as well as continuing confusion with *Eustixia* Hübner, 1823 (see para. 2 above). If, on the other hand, *Eustixis* were simply regarded as a misspelling of *Eustixia* then the specific name of *Lactura pupula* (Hübner, [1831]) would be invalid as a junior primary homonym of the pyralid *Eustixia pupula* of 1823 and a new name would be needed; this would also cause instability. As pointed out by Nye & Fletcher (1991, p. 126), it is desirable to conserve the generic name *Lactura*, and also to maintain *pupula* in both the completely different taxonomic senses in which that specific name was originally published and has remained in use.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the following names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
   (a) *Eustixis* Hübner, [1831];
   (b) *Mieza* Walker, 1854;

(2) to place the following names on the Official List of Generic Names in Zoology:
   (a) *Eustixia* Hübner, 1823 (gender: feminine), type species by subsequent designation by Kirby (1892) *Eustixia pupula* Hübner, 1823;
   (b) *Lactura* Walker, 1854 (gender: feminine), type species by monotypy *Lactura dives* Walker, 1854;

(3) to place the following names on the Official List of Specific Names in Zoology:
  (a) *pupula* Hübner, 1823, as published in the binomen *Eustixia pupula* (specific name of the type species of *Eustixia* Hübner, 1823);
  (b) *pupula* Hübner, [1831], as published in the binomen *Eustixis pupula*;
  (c) *dives* Walker, 1854, as published in the binomen *Lactura dives* (specific name of the type species of *Lactura* Walker, 1854);

(4) to place the following names on the Official Index of Rejected and Invalid Generic Names in Zoology:
  (a) *Eustixis* Hübner, [1831], as suppressed in (1)(a) above;
  (b) *Mieza* Walker, 1854, as suppressed in (1)(b) above.

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Case 2361

Strongylopus Tschudi, 1838 (Amphibia, Anura): proposed designation of *Rana fasciata* Smith, 1849 as the type species

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Abstract. The purpose of this application is to designate *Rana fasciata* Smith, 1849 as the type species of the nominal genus *Strongylopus* Tschudi, 1838 in accordance with current universal understanding and usage. The genus was based on another taxonomic species of which the name, *Rana fasciata* Burchell, 1824, has been suppressed (Opinion 713, November 1964). This latter name has been generally considered to be a synonym of *Strongylopus grayii* (Smith, 1849). Species of frog included in the genus *Strongylopus* (family RANIDAE) are found in uplands in South Africa northward to Tanzania.

Keywords. Nomenclature; taxonomy; Amphibia; Anura; RANIDAE; frogs; *Strongylopus*; *Strongylopus fasciatus*; *Strongylopus grayii*; Southern Africa; East Africa.

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1. For a long time the generic name *Strongylopus* Tschudi, 1838 was submerged as a subjective synonym of *Rana* Linnaeus, 1758. It was resurrected by Van Dijk (1966, p. 252) and since then has been used by a number of authors as a valid generic name (see Van Dijk, 1971, 1972; Channing & Van Dijk, 1976, p. 25, fig. 16; Channing, 1979, 1981, 1986; Frost, 1985, pp. 522–523; Poynton & Broadley, 1985; Duellman & Trueb, 1986, p. 546) or subgeneric name (see Clarke, 1981, pp. 325, 326; Dubois, 1981a, p. 929; 1981b, pp. 233, 235; 1987a). A few authors (Passmore & Carruthers, 1979, p. 128; Wager, 1986, pp. 43, 70–72) have continued to regard it as a synonym of *Rana*, but it is likely that the name will remain in use. At present six taxonomic species are recognised (see Channing, 1981).

2. The name *Strongylopus* was proposed by Tschudi (1838, pp. 38, 78–79) for a single nominal species, *Rana fasciata* 'Boie'. In his use of the name, Boie (1832, p. 186) referred to *Rana fasciata* Burchell (1824, p. 32), the earliest use of the specific name. Burchell described the taxon as having a small, short body and as 'a very pretty and new species of frog of a green color, and marked by a longitudinal yellow stripe on its back, and by transverse stripes of brown on its hind legs'. Boie used the name *fasciata* for specimens in the Natuurhistorisch Museum in Leiden which were among those subsequently studied by Tschudi. No specimens or illustrations of *fasciata* attributable to Burchell are known to exist.

3. Duméril & Bibron (1841, p. 389) included *Strongylopus* Tschudi as a synonym of *Rana* Linnaeus. They included a nominal species *fasciatus* 'Boie' and described four varieties, based on material in the Muséum d'Histoire Naturelle in Paris. In describing variety 'D' (p. 391) they noted: 'Nous lui conservons le nom par lequel feu Boie avait désigné dans le musée de Leyde des sujets appartenant sans doute à notre

quatrième variété, nom sous lequel l'espèce été citée par M. Tschudi comme type d'un genre particulier, qu'il a appelé *Strongylopus*'. In the Atlas to their work (1854, pl. 86, fig. 3; not fig. 2 as given by Parker & Ride, BZN **19**: 291, September 1962), Duméril & Bibron figured the open mouth of 'Strongylope à bandes'. It was later shown (see Parker & Ride, BZN **19**: 291) that Duméril & Bibron's material included two taxonomic species.

4. Andrew Smith (1849; see Waterhouse, 1880, p. 490 for the date of publication) included several species in *Rana*, among them *fasciata* 'Boie' (pl. 78, text, figs. 1, 1a -1c) and a new nominal species, *grayii* (pl. 78, text, figs. 2, 2a–2c). The incorrect spelling *grayi* has been used for the latter species by nearly all subsequent authors, as noted by Comrie Greig, Boycott & Villiers (1979, p. 25). In describing *fasciata*, Smith noted that this was the species placed in *Strongylopus* by Tschudi. His fig. 1 accords with the colour pattern of Duméril & Bibron's variety 'D', and his fig. 2b of the open mouth of *Rana grayii* accords with that figured by Duméril & Bibron as 'Strongylope à bandes'. In describing *grayii*, Smith noted: 'It has, I believe, been considered by Duméril & Bibron as a variety of *Rana fasciata*, but I cannot regard it as such'. Smith's species, *fasciata* and *grayii*, were the same two species represented by variety 'D' and 'Strongylope à bandes' respectively in Duméril & Bibron's material in Paris. Smith described *R. fasciata* as having the 'upper surface of the head and back anteriorly light rusty wood-brown ... six longitudinal stripes on the back and sides ... a stripe along the anterior part of leg close to the body, and two others, or a few spots only, on the parts towards the toes ... body long, rather slender, and very narrow immediately in front of the hinder extremities'. He described *R. grayii* as having 'two or more narrow transverse bars on anterior of fore legs, three on the outer side of the thighs, three towards the posterior side of the leg, and two or more on the outer side of the tarsus ... body short and moderately robust'. Since 1849 all authors have consistently used the names *fasciata* and *grayii* as Smith defined them.

5. Günther (1859, p. 20), adopting *Rana* as the generic name, recorded the name *fasciata* used by Boie (1832), Tschudi (1838), Duméril & Bibron (1841) and Smith (1849) as representing the same species. Fitzinger (1860, p. 414) and Steindachner ([1867], pp. 21–22) both adopted the name *Strongylopus*; Fitzinger recorded the use of *fasciata* by Boie, Tschudi and Duméril & Bibron as synonymous, while Steindachner noted the use of the name by Tschudi, Duméril & Bibron and Smith as referring to the same taxon. Parker & Ride (BZN **19**: 291), however, pointed out that the specimens in Leiden seen by Tschudi included the same two species as are represented in Duméril & Bibron's Paris material and that those specimens collected by Boie and recorded by him as *fasciata* Burchell belonged to the taxon later called *grayii* by Smith. Recognition that Smith's name *grayii* related to the species called *fasciata* by Burchell (1824) meant that *fasciata* was the valid name for that taxon, and that the species universally called *fasciata* would require a new name. An application by Parker & Ride (BZN **19**: 290–292; September 1962) sought to avoid a transfer of names, which would have resulted in confusion, and to maintain nomenclatural stability by designating one of Smith's specimens of *fasciata* as the neotype of *Rana fasciata* Burchell, 1824. Prof Hobart M. Smith and Prof J.C. Poynton (BZN **20**: 254, 255; July 1963) supported the conservation of the name *Rana fasciata* in its currently accepted usage, but the former was opposed to crediting authorship to Burchell, who had not used the name in this sense. In Opinion 713 (November 1964) all uses of

fasciata (as published in combination with *Rana*) prior to that by Smith (1849) were suppressed for both priority and homonymy, and a lectotype (catalogue no. BM(NH) 58.11.25.127 in the Natural History Museum, London) for Smith's nominal taxon *R. fasciata* was designated. This specimen had been proposed by Parker & Ride as a neotype for *Rana fasciata* Burchell, 1824 but this latter course did not receive the necessary approval by the Commission (the implication in Opinion 713 that a neotype designation for *fasciata* Burchell had been confirmed is an error).

6. Opinion 713 has the result that *fasciata* is not the valid name for the taxonomic species on which *Strongylopus* was based. At the time of Parker & Ride's application *Strongylopus* was considered to be a synonym of *Rana* and this was therefore of little consequence (para. 13 on BZN **19**: 292 and para. 1 above). The valid name for the type species of *Strongylopus* has been taken to be *Rana grayii* Smith, a subjective synonym of the suppressed *fasciata* Burchell. However, it might be confusing for future workers to have a nominal species *S. fasciatus* (Smith) included in the genus and yet have *grayii* as the valid name of the type species *Rana fasciata* Burchell, 1824 (even though this course would not require Commission action). Moreover, Comrie Greig, Boycott & Villiers (1979, p. 28) suggested that *fasciata* Burchell is a synonym of *Rana fuscigula* Duméril & Bibron, 1841 (p. 386) and not of *grayii* Smith. Fitzinger (1843, p. 31), Van Dijk (1966, p. 252), Comrie Greig et al. (1979, p. 24) and Frost (1985, p. 522) cited '*Rana fasciata*' as the type and it is desirable to maintain continuity by following previous authors. *Rana grayii* and *R. fasciata*, both of Smith (1849), are closely related species and any genus-group taxon containing one of them is bound to contain the other. The specific name of *R. grayii* was placed on the Official List in Opinion 713 and is defined by the lectotype designated by Parker & Ride (1962; BZN **19**: 292), a female specimen (catalogue no. BM(NH) 58.11.25.138 in the Natural History Museum, London) collected by Smith from the 'Cape'.

7. In a previous publication (Dubois, 1987b) I mentioned (p. 72) three options: (A) taking the name *fasciata* from Duméril & Bibron (1841); (B) designating *R. grayii* Smith, 1849 as the type species of *Strongylopus*; and (C) designating *R. fasciata* Smith, 1849 as the type species. The third course, which I now propose, does not involve any modification to Opinion 713. It maintains a nominal species *R. fasciata* as the type species and, at the same time, provides continuity in the usage of the name *Strongylopus fasciatus* for a particular taxonomic species.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Strongylopus* Tschudi, 1838 and to designate *Rana fasciata* Smith, 1849 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Strongylopus* Tschudi, 1838 (gender: masculine), type species by designation in (1) above *Rana fasciata* Smith, 1849;

(3) to add to the entry on the Official List of Specific Names in Zoology for the name *fasciata* Smith, 1849, as published in the binomen *Rana fasciata* and as defined by the lectotype designated in Opinion 713 (November 1964), an endorsement that it is the specific name of the type species of *Strongylopus* Tschudi, 1838.

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Case 3049

Cnemidophorus neomexicanus Lowe & Zweifel, 1952 (Reptilia, Squamata): proposed conservation of the specific name

Hobart M. Smith[1], Harry L. Taylor[2], James M. Walker[3], Ralph W. Axtell[4], Steven J. Beaupre[3], David Chiszar[5], James E. Cordes[6], Julio A. Lemos-Espinal[7], Andrew H. Price[8], Frank van Breukelen[1] & Richard G. Zweifel[9] (Addresses on p. 171)

Abstract. The purpose of this application is to conserve the specific name of *Cnemidophorus neomexicanus* Lowe & Zweifel, 1952 for a parthenogenetic whiptail lizard (family TEIIDAE) from the southwestern United States. The name has been unambiguously applied to the species and has been in consistent use for the last 30 years. However, it is threatened by *C. perplexus* Baird & Girard, 1852, the application of which has long been ambiguous and contentious.

Keywords. Nomenclature; taxonomy; Reptilia; Squamata; whiptail lizards; TEIIDAE; *Cnemidophorus neomexicanus*; southwestern United States.

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1. The status of the specific name of *Cnemidophorus perplexus* Baird & Girard, 1852 has long been questioned but has never been explicitly resolved. During its 145-year history the name has been applied to virtually every species of the *C. sexlineatus* (Linnaeus, 1766) group in the southwestern United States (see Wright, 1969). The specimen which since 1931 has been accepted as the lectotype has been variously interpreted since 1967 as unidentifiable, or as a hybrid from a parthenogenetic-bisexual union, or as a parthenogenetic species later described as *Cnemidophorus neomexicanus* Lowe & Zweifel, 1952. During the last 30 years the name *perplexus* has been abandoned and *neomexicanus* has consistently been used. As a group interested in the taxonomy of the genus *Cnemidophorus* in the southwestern United States we propose that *perplexus* be suppressed.

2. In 1852 Baird & Girard (p. 128) briefly described the new species *Cnemidophorus perplexus* on the basis of several specimens (as indicated by citation of a number of localities) in the 'Museum of the Smithsonian Institution', but without citation of their catalog numbers. The three localities were given as 'Valley of the Rio San Pedro of the Rio Grande del Norte. Specimens were also collected by Gen. Churchill, on the Rio Grande west of San Antonia [sic], Texas, and by Dr William Gambel on his last journey to California'. The localities and collectors cited have enabled subsequent workers to determine with reasonable certainty on which specimens Baird & Girard (1852) based the name but, inasmuch as two species are represented among the four supposed syntypes now extant, application of the name has rested upon subsequent designation of a lectotype.

3. Much argument has ensued regarding the earliest acceptable designation of a lectotype for *Cnemidophorus perplexus*. Axtell (1981) cogently argued that Baird (1859, p. 10) regarded USNM 3020 (now lost) as the type because this is the first listed

specimen in the 1859 work and the locality San Pedro is the first (and main one) listed in the original description. Baird & Girard (1853, p. viii) explicitly stated their policy of regarding the type as the first for which measurements were given — evidence of the primacy they attached to the first specimens listed. No such explicit statement exists in either the original (1852) description or Baird's (1859) work, hence neither publication can be accepted as having established a holotype or lectotype for *C. perplexus*, probable intent notwithstanding. *Cnemidophorus inornatus* Baird, 1858 was represented by the two *C. perplexus* syntypes USNM 3050 and USNM 248691 taken by Churchill 'on the Rio Grande west of San Antonia', and by a syntype collected by William Gambel, now USNM 30885, originally catalogued with another specimen (see following para.) under USNM 3060, from an uncertain locality, possibly the same as that of the present USNM 3060. Thus the original syntypes included at least three and probably four (the lost USNM 3020) examples of *C. inornatus*. The name *C. perplexus* was erroneously applied to this species during the first half of the present century, until Schmidt & Smith (1944, pp. 85–87) distinguished the two species. The citation by Maslin, Beidleman & Lowe (1958, p. 343) of the five specimens under USNM 3022 as syntypes of *C. perplexus* is in error; they are syntypes of *C. gularis*, established (p. 128) in the same work as *C. perplexus*, and USNM 3022a is the lectotype (see Cochran, 1961, p. 98).

4. Cope (1893, p. 34) stated that 'the type specimen [of *C. perplexus*] is the largest obtained, and is probably adult' but did not cite a catalog number or other unambiguous identification of the specimen. Burt (1931, p. 122) accepted Cope's criterion of the largest specimen and explicitly cited USNM 3060 as the female lectotype. This designation has subsequently received general acceptance despite the fact that the specimen was among the supplementary ones listed.

5. The taxonomic population represented by USNM 3060 has been even more uncertain, in part because the specimen was obtained by William Gambel at an unknown locality on one of his trips to California. The specimen's probable geographic origin was most carefully reviewed by Maslin et al. (1958), who showed that Burt's (1931) statement of the 'Valley of the Rio Grande del Norte' as type locality of *C. perplexus* was in error (although on such bases Wright & Degenhardt, 1962 subsequently further narrowed Maslin et al.'s restriction to 'San Pedro Creek and Tanque Arroyo between the Rio Grande and Hagan, Sandoval County, New Mexico'). Cope (1900, p. 573) treated *Cnemidophorus perplexus* as a subspecies of *C. tessellatus* Say, 1823; all six editions of the *Check list of North American amphibians and reptiles*, from 1917 to 1953, as well as Smith (1946) and Burger (1950, p. 3), accepted it as a full species; Burt (1931, p. 125) regarded it as representative of a subspecies of *Cnemidophorus sexlineatus*; Lowe & Zweifel (1952, p. 231) followed established custom at that time in regarding it as a junior synonym of *C. inornatus*; Wright & Lowe (1967) concluded that USNM 3060, taken to be the lectotype, was a hybrid between *C. neomexicanus* Lowe & Zweifel, 1952 (parthenogenetic) and *C. inornatus* (bisexual), and Wright (1969) detailed the confusing history of application of the name *C. perplexus*, proposing its suppression (but never applying to the Commission, perhaps in part because the lectotype was thought to be a hybrid); and both Taylor & Walker (1996) and Walker (1997) returned the name to synonymy with *C. neomexicanus*, showing conclusively that USNM 3060 is not a hybrid. Taylor & Walker (1996) also proposed the suppression of *perplexus*.

6. Since 1967 the influence of an analysis by Wright & Lowe (1967) has resulted (with few exceptions; see, for example, Parker, Walker & Paulissen, 1989, who mentioned both taxa) in abandonment of the name *C. perplexus* and consistent use of *C. neomexicanus*. The latter name has become well established in many disciplines and in the popular literature, as demonstrated for example in the most popular field guides to United States herpetology by Stebbins (1954, 1966, 1985), Conant (1975), Behler & King (1979), Smith & Brodie (1982), and Conant & Collins (1991); various articles in the highly technical symposium on unisexual vertebrates (Dawley & Bogart, 1989); the important review of the biology of the genus (Wright & Vitt, 1993); and the guide to the herpetology of New Mexico (Degenhardt, Painter & Price, 1996).

7. In view of the current stability of the name *Cnemidophorus neomexicanus* Lowe & Zweifel, 1952 (p. 230), and the long history of confusion centering upon the name *C. perplexus* Baird & Girard, 1852 (see Taylor & Walker, 1996), we, as most of the concerned living specialists on this group of lizards, here propose that the name *perplexus* be suppressed. Approval of the proposal will bring the uncertainty and controversy over *perplexus* to a close and will assure the continued use of the name *neomexicanus* for this whiptail lizard of the southwestern United States. The nominal taxon is based on the holotype MVZ 55807, collected by Charles H. Lowe, Jr. in August 1947 from Socorro County, New Mexico, and deposited in the Museum of Vertebrate Zoology, University of California at Berkeley. The specimen was figured by Lowe & Zweifel (1952, pl. 1, fig. a). There are also 47 paratype specimens.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the specific name *perplexus* Baird & Girard, 1852, as published in the binomen *Cnemidophorus perplexus*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Specific Names in Zoology the name *neomexicanus* Lowe & Zweifel, 1952, as published in the binomen *Cnemidophorus neomexicanus*;

(3) to place on the Official Index of Rejected and Invalid Names in Zoology the name *perplexus* Baird & Girard, 1852, as published in the binomen *Cnemidophorus perplexus* and as suppressed in (1) above.

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Case 3044

Generic and specific names of birds (Aves) conventionally accepted as published in the *Proceedings of the Zoological Society of London* and monographic works by John Gould and other contemporary zoologists: proposed conservation by suppression of all prior usages

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Abstract. The purpose of this application is to conserve a large number of generic and specific names of birds, many of them well known, in their conventionally accepted places of publication, mainly the *Proceedings of the Zoological Society of London*; authors involved are J. Gould, G.R. Gray, R. Owen and others. Conservation of most requires suppression of prior usages published in the London periodicals *The Analyst*, *The Athenaeum* and *The Literary Gazette*. None of these references is currently in use as the original source of the names. To accept them now would (a) displace a number of names in current use, (b) require changes to date and place of publication of the names, and (c) introduce instability and generate argument over the validity of the names due to inadequacy of the accompanying descriptions.

Keywords. Nomenclature; taxonomy; Aves; J. Gould; G.R. Gray; R. Owen; *Proceedings of the Zoological Society of London.*

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1. As a matter of practice, John Gould and other contemporary English zoologists such as G.R. Gray and Richard Owen presented many if not most of their new taxa of birds at meetings of the Zoological Society of London for publication in that Society's *Proceedings*. Because of long delays in printing the parts of the *Proceedings* up to 1859 (see dates in Sclater, 1893; Duncan, 1937), many of the names were published earlier in two other places of publication.

One place was regional, familial and collection monographs, such as Gould's *The Birds of Australia* (1840–1848) and Gray's *The Genera of Birds* (1844–1849). Prior publication in these monographs has long been recognized and established in ornithological nomenclature; descriptions and references to type material and localities there are often more detailed than in the original papers submitted to the *Proceedings*.

The other place was the periodicals of the day, such as *The Athenaeum*, *The Literary Gazette* and, less importantly, *The Analyst*, which published summary reports of the meetings of the Zoological Society of London, often within a week of

the meetings. Until 1990 there had been little systematic screening of these periodicals for birds; new descriptions there were commonly abridged to the point where names verged on nomina nuda. As a result, few of the names appearing in these serials have been treated seriously (see Whitley, 1938).

2(a). Bruce & McAllan (1990) examined these three periodicals *The Analyst*, *The Athenaeum*, and *The Literary Gazette* — for prior publication of avian generic and specific names between the years 1826 and 1881. They concluded that the names published there for 11 genera and 44 species were accompanied by sufficient description to be valid as older usages or orthographic variants of those commonly accepted as being first published in the *Proceedings of the Zoological Society of London* or in Gould's or Gray's monographs. Bruce & McAllan (1990, p. 461) recorded only one generic name, and one specific name in combination with it, which had been accepted in ornithological nomenclature with availability from *The Athenaeum* (1850, no. 1207, p. 1315): *Balaeniceps* Gould and *B. rex* Gould (see Kahl, 1979). The generic name *Balaeniceps*, as published in the *Proceedings of the Zoological Society of London*, was placed on the Official List in Opinion 67 (April 1916); the reference was changed to *The Athenaeum* in Direction 19 (August 1955), at which time *B. rex* was also placed on the Official List.

2(b). One other generic name and three specific names relevant to this case have also been placed on Official Lists by Commission action; these are:

(i) *Notornis* Owen, 1848, placed on the Official List of Generic Names in Opinion 67 (April 1916), where the *Proceedings of the Zoological Society of London* was cited as its place of publication. The only action proposed here is to suppress all uses of *Notornis* prior to its publication in the *Proceedings*.

(ii) *Notornis mantellii* Owen, 1848, placed on the Official List of Specific Names in Direction 43 (October 1956). No action is proposed here.

(iii) *Dinornis struthoides* Owen, 1844, placed on the Official List of Specific Names in Opinion 229 (April 1954), where the *Transactions of the Zoological Society of London* was cited as its place of publication. The only action proposed here is to suppress all uses of *D. struthoides* prior to its publication in the *Transactions*.

(iv) *Dinornis otidiformis* Owen, 1844, placed on the Official List of Specific Names in Opinion 1876 (June 1997), where the *Transactions of the Zoological Society of London* was cited as its place of publication. The only action proposed here is to suppress all uses of *D. otidiformis* prior to its publication in the *Transactions*.

2(c). One further binomen, *Nyctidus pectoralis* Gould, in *The Athenaeum* (18 November 1837, no. 525, p. 851), has never been used in primary literature; its application is unclear. Bruce & McAllan (p. 456) interpreted *Nyctidus* as a misspelling of *Nyctibius* Vieillot, 1816, and *Nyctidus pectoralis* Gould as an unused senior synonym for *Nyctibius griseus abbotti* Richmond, 1917 from Haiti. Its brief description in *The Athenaeum*, which refers only to its short tarsus, is based on drawings of a male and female that were given no provenance and which were mentioned separately from the Haitian material that Gould was then exhibiting. Reference to Felix de Azara in connection with the drawings makes the locality Haiti even less likely. To clear the literature, we propose that the name *Nyctidus pectoralis* Gould, 18 November 1837 should be suppressed.

3. To our knowledge, none of the remaining generic and specific names listed in this application has been taken up in principal ornithological references; none is used in Sibley & Monroe (1990, 1993) or Christidis & Boles (1994). To adopt them now would disturb established ornithological nomenclature by:

(i) changing the date and place of publication from source references that have been used for each of these names for more than 50 years and in many cases more than 100 years;

(ii) replacing usually precise and detailed descriptions for each name in literature readily available to systematic zoologists with sketchy and often ambiguous accounts in now rare and often inaccessible serials;

(iii) opening many of the names to interpretation as nomina nuda and argument as to whether they are available, for example, *Ptiloris victoriae* Gould, 1849 in *The Athenaeum* (no. 1152, p. 1183), and *Chrysococcyx minutillus* Gould, March 1859 and *Excalfatoria minima* Gould, March 1859, both in *The Athenaeum* (no. 1639, p. 425) and *The Literary Gazette* (no. 39(n.s.), p. 406);

(iv) replacing a number of long-established names with unused senior synonyms, for example, *Leipoa* Gould, December 1840 (MEGAPODIIDAE) with *Pedionomus* Gould, October 1840; and *Pedionomus* Gould, December 1840, as the name for the Plains Wanderers (PEDIONOMIDAE), with *Turnicigralla* Des Murs, 1845. The latter action would threaten the long-established family-group name PEDIONOMIDAE for the Plains Wanderers which, being based on a generic name that is a junior homonym, would have to be replaced also. Although Bruce & McAllan recommended suppression of these senior generic synonyms, no action has been taken until now.

4. At its meeting in Vienna in August 1994, the Standing Committee on Ornithological Nomenclature (SCON) of the International Ornithological Congresses assessed the implications of using, as senior, the generic and specific names published in the London periodicals as recognized by Bruce & McAllan. SCON concluded that, in order to avoid nomenclatural confusion and instability, all should be suppressed except those already accepted into avian nomenclature.

5. In Opinion 1606 (June 1990) the Commission ruled on an application submitted by Ms M. LeCroy for the conservation of one of the binomina recorded by Bruce & McAllan (pp. 473–474). This Opinion ruled that the original spelling *Semeioptera wallacei*, as published in the *The Literary Gazette* (no. 39(n.s.), p. 406), was to be corrected to *Semioptera wallacii*. However, the original spelling had also been published simultaneously in *The Athenaeum* (no. 1639, p. 425). Suppression of the name in both serials and all other publications prior to its conventionally accepted publication in the *Proceedings of the Zoological Society of London* for 1859 (p. 130) would not only clarify the situation but also meet the objectives of Opinion 1606 by conserving the spelling *Semioptera wallacii* G.R. Gray, May 1859 in its accustomed spelling. This option was mentioned by one of the Commissioners (BZN, **47**: 170) in considering the case for Opinion 1606, and we propose that this action be taken now (paras. 8(1)(a)(5) and 8(1)(c)(4) below).

6. Two of the names concerned are junior homonyms and therefore invalid: *Atrichia* Gould, 1844 (also published as *Atricha*), a junior homonym of *Atrichia* Schrank, 1803 (Insecta), and *Eriopus* Gould, 1847, a junior homonym of *Eriopus*

Treitschke, 1825 (Insecta). We propose in paras. 8(6)(3) and 8(6)(5) respectively that *Atrichia* Gould (as well as *Atricha* Gould) and *Eriopus* Gould be put on the Official Index.

7. We also propose that the generic and specific names listed in paras. 8(2), 8(3), 8(4) and 8(5) below should be conserved with spelling, authorship, date and place of publication, and type species in the case of genera, as currently used. This would be achieved by suppression of the senior names published in *The Analyst*, *The Athenaeum* and *The Literary Gazette*. Our proposal for the suppression of these names is set out in paragraph 8(1) under four headings:

8(1)(a) and 8(1)(c): proposals for the suppression of generic and specific names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy. The effect is that these names, having been suppressed for priority, cannot be used as valid names; however, they stand as homonyms and this prevents their subsequent application to any other taxa. None in this case comes from the *Proceedings of the Zoological Society of London* or any later publication.

8(1)(b) and 8(1)(d): proposals for the suppression of generic and specific names for the purposes of both the Principle of Priority and the Principle of Homonymy. Such names do not stand as homonyms and so, although suppressed here in their stated place of publication, remain available for subsequent use.

For convenience we have given the full reference and date for each name. Dates of publication of the *Proceedings of the Zoological Society of London* are taken from the compilation in Duncan (1937). Monthly dates specified ambiguously, for example 'between February and June', are interpreted inclusively, i.e. as 30 June. In accordance with Recommendation 22A of the Code, dates of publication determined only from external or secondary evidence are enclosed in square brackets. Such is the case with the *Proceedings of the Zoological Society of London* and the *Transactions of the Zoological Society of London* where the day and month of publication, and often the year, is known only from external evidence produced by Sclater (1893) and Duncan (1937).

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:

(a) to suppress for the purposes of the Principle of Priority but not for those of the Principle of Homonymy the following generic names:

(1) *Aplornis* Gould, 1 or 3 October 1836, *The Analyst*, **17**: 152;

(2) *Atricha* Gould, 27 January 1844, *The Athenaeum*, no. 848: 90;

(3) *Dendrochetta* Gould, 18 May 1833, *The Literary Gazette*, no. 852: 313;

(4) *Nyctidus* Gould, 18 November 1837. *The Athenaeum*, no. 525: 851;

(5) *Semeioptera* G.R. Gray, 26 March 1859, *The Athenaeum*, no. 1639: 425 and *The Literary Gazette*, no. 39(n.s.): 406;

(b) to suppress for the purposes of both the Principle of Priority and the Principle of Homonymy the following generic names and all uses of the names prior to the publication of the same names given in para. 8(2) below:

(1) *Notornis* Owen, 22 January 1848, *The Literary Gazette*, no. 1618: 72;

(2) *Oreotrochilus* Gould, 27 February 1847, *The Literary Gazette*, no. 1571: 171;

(3) *Pedionomus* Gould, 31 October 1840, *The Athenaeum*, no. 679: 876;
(4) *Sericornis* Gould, 2 December 1837, *The Athenaeum*, no. 527: 883;
(5) *Urubitornis* Verreaux, 7 June 1856, *The Athenaeum*, no. 1493: 717;

(c) to suppress for the purposes of the Principle of Priority but not for those of the Principle of Homonymy the following specific names first published in combination with the generic name shown:
(1) *calconeri*, *Cygnus*, Parker, 23 December 1865, *The Athenaeum*, no. 1991: 893;
(2) *pectoralis*, *Nyctidus*, Gould, 18 November 1837, *The Athenaeum*, no. 525: 851;
(3) *thibetanus*, *Tetraogallus*, Gould, 26 March 1853, *The Literary Gazette*, no. 1888: 307;
(4) *wallacei*, *Semeioptera*, G.R. Gray, 26 March 1859, *The Athenaeum*, no. 1639: 425 and *The Literary Gazette*, no. 39(n.s.): 406;

(d) to suppress for the purposes of both the Principle of Priority and the Principle of Homonymy the following specific names first published in combination with the generic name shown and all uses of the names prior to the publication of the same names given in para. 8(4) below:
(1) *aequatorialis*, *Momotus*, Gould, 14 November 1857, *The Literary Gazette*, no. 2130: 1100;
(2) *armata*, *Marganetta* (= *Merganetta*), Gould, 4 December 1841, *The Literary Gazette*, no. 1298: 785;
(3) *aurantiiventris*, *Trogon*, Gould, 17 May 1856, *The Athenaeum*, no. 1490: 620;
(4) *aurora*, *Helianthea*, Gould, 16 April 1853, *The Athenaeum*, no. 1329: 481 and *The Literary Gazette*, no. 1891: 385;
(5) *bennetti*, *Casuarius*, Gould, 12 December 1857, *The Athenaeum*, no. 1573: 1551–1552 and *The Literary Gazette*, no. 2134: 1197;
(6) *caeruleogularis*, *Aulacorhamphus*, Gould, 26 February 1853, *The Athenaeum*, no. 1322: 263;
(7) *chrysopterygius*, *Psephotus*, Gould, 14 November 1857, *The Literary Gazette*, no. 2130: 1100;
(8) *clamosa*, *Atricha*, Gould, 27 January 1844, *The Athenaeum*, no. 848: 90;
(9) *coronatus*, *Malurus*, Gould, 14 November 1857, *The Literary Gazette*, no. 2130: 1100;
(10) *cyanocollis*, *Trochilus*, Gould, 16 April 1853, *The Athenaeum*, no. 1329: 481 and *The Literary Gazette*, no. 1891: 385;
(11) *didiformis*, *Dinornis*, Owen, 2 December 1843, *The Literary Gazette*, no. 1402: 778–779;
(12) *elephantopus*, *Dinornis*, Owen, 2 April 1856, *The Athenaeum*, no. 1485: 462–463 and *The Literary Gazette*, no. 2047: 164–165;
(13) *erythroprocta*, *Ruticilla*, Gould, 12 May 1855, *The Athenaeum*, no. 1437: 557 and *The Literary Gazette*, no. 1999: 302;
(14) *floriceps*, *Trochilus*, Gould, 16 April 1853, *The Athenaeum*, no. 1329: 481 and *The Literary Gazette*, no. 1891: 385;
(15) *giganteus*, *Dinornis*, Owen, 2 December 1843, *The Literary Gazette*, no. 1402: 778–779;

(16) *gracilis, Dinornis*, Owen, 18 November 1854, *The Athenaeum*, no. 1412: 1402;
(17) *hyperythrus, Odontophorus*, Gould, 12 November 1857, *The Literary Gazette*, no. 2130: 1100;
(18) *iris, Helianthea*, Gould, 16 April 1853, *The Athenaeum*, no. 1329: 481 and *The Literary Gazette*, no. 1891: 385;
(19) *irroratus, Dromaeus*, Bartlett, 28 May 1859, *The Athenaeum*, no. 1648: 717 and *The Literary Gazette*, no. 48(n.s.): 642;
(20) *mexicana, Meleagris*, Gould, 12 April 1856, *The Athenaeum*, no. 1485: 462–463 and *The Literary Gazette*, no. 2047: 164–165;
(21) *micropterus, Podiceps*, Gould, 11 April 1868, *The Athenaeum*, no. 2111: 531;
(22) *micrurus, Calothorax*, Gould, 26 November 1853, *The Athenaeum*, no. 1361: 1421 and *The Literary Gazette*, no. 1923: 1150;
(23) *minima, Excalfatoria* (= *Excalfactoria*), Gould, 26 March 1859, *The Athenaeum*, no. 1639: 425 and *The Literary Gazette*, no. 39(n.s.): 406;
(24) *minutillus, Chrysococcyx*, Gould, 26 March 1859, *The Athenaeum*, no. 1639: 425 and *The Literary Gazette*, no. 39(n.s.): 406;
(25) *nazarenus, Didus*, Bartlett, 27 December 1851, *The Literary Gazette*, no. 1823: 923;
(26) *notabilis, Nestor*, Gould, 26 April 1856, *The Athenaeum*, no. 1487: 524;
(27) *ocellatus, Pedionomus*, Gould, 31 October 1840, *The Athenaeum*, no. 679: 876;
(28) *otidiformis, Dinornis*, Owen, 2 December 1843, *The Literary Gazette*, no. 1402: 778–779;
(29) *owenii, Apteryx*, Gould, 12 June 1847, *The Athenaeum*, no. 1024: 647 and *The Literary Gazette*, no. 1586: 433;
(30) *phaenolaema, Heliothrix*, Gould, 16 June 1855, *The Athenaeum*, no. 1442: 708;
(31) *purpureiceps, Heliothrix*, Gould, 16 June 1855, *The Athenaeum*, no. 1442: 708;
(32) *pusillus, Chordeiles*, Gould, 27 April 1861, *The Athenaeum*, no. 1748: 565 and *The Literary Gazette*, no. 148(n.s.): 398;
(33) *sallaei, Chrysotis*, Sclater, 14 November 1857, *The Literary Gazette*, no. 2130: 1100;
(34) *serrirostris, Anser*, Gould, 27 March 1852, *The Literary Gazette*, no. 1836: 306;
(35) *struthoides, Dinornis*, Owen, 2 December 1843, *The Literary Gazette*, no. 1402: 778–779;
(36) *veraguanensis, Odontophorus*, Gould, 17 May 1856, *The Athenaeum*, no. 1490: 620;
(37) *victoriae, Ptiloris*, Gould, 24 November 1849, *The Athenaeum*, no. 1152: 1183;
(38) *viola, Heliangelus*, Gould, 16 April 1853, *The Athenaeum*, no. 1329: 481 and *The Literary Gazette*, no. 1891: 385;
(39) *v-nigrum, Somateria*, G.R. Gray, 1 December 1855, *The Athenaeum*, no. 1466: 1404;

(2) to place on the Official List of Generic Names in Zoology the following names:
   (1) *Aplonis* Gould, [18 October] 1836, *Proceedings of the Zoological Society of London*, **1836**: 73 (gender: feminine), type species, by subsequent designation of G.R. Gray, 1840 (*A List of the Genera of Birds*: 30): *Aplonis fusca* Gould, 1836, *Proceedings of the Zoological Society of London*, **1836**: 73;
   (2) *Dendrocitta* Gould, [5 July] 1833, *Proceedings of the Zoological Society of London*, **1833**: 57 (gender: feminine), type species, by original designation: *Dendrocitta leucogastra* Gould, 1833, *Proceedings of the Zoological Society of London*, **1833**: 57;
   (3) *Oreotrochilus* Gould, [29 March] 1847, *Proceedings of the Zoological Society of London*, **1847**: 9 (gender: masculine), type species, by original designation: *Orthorynchus estella* d'Orbigny & Lafresnaye, 1838, *Magasin de Zoologie*, (2)**2**: 32;
   (4) *Pedionomus* Gould, 1 December 1840, *The Birds of Australia*, pt. 1 (text to pl. 80 in vol. 5, 1848) (gender: masculine), type species, by monotypy: *Pedionomus torquatus* Gould, 1840, *The Birds of Australia*, pt. 1 (text to pl. 80 in vol. 5, 1848);
   (5) *Sericornis* Gould, April (= 30 April) 1838, *A Synopsis of the Birds of Australia, and the Adjacent Islands*, pt. 4, text to pl. 58 (gender: masculine), type species, by original designation: *Acanthiza frontalis* Vigors & Horsfield, 1827, *Transactions of the Linnean Society of London*, **15**: 226;
   (6) *Urubitornis* Verreaux, [11 November] 1856, *Proceedings of the Zoological Society of London*, **1856**: 145 (gender: masculine), type species, by monotypy: *Circaetus solitarius* Tschudi, 1844, *Archiv für Naturgeschichte*, **10**: 264;

(3) to emend the entry on the Official List of Generic Names in Zoology for *Semioptera* G.R. Gray to record date and place of publication to be between July and October (= 31 October) 1859, *Proceedings of the Zoological Society of London*, **1859**: 130 (gender: feminine), type species, by monotypy: *Paradisaea* (*Semioptera*) *wallacii* G.R. Gray, 1859, *Proceedings of the Zoological Society of London*, **1859**: 130;

(4) to place on the Official List of Specific Names in Zoology the following specific names first published in combination with the generic name shown:
   (1) *aequatorialis*, *Momotus*, Gould, [12 January 1858], *Proceedings of the Zoological Society of London*, **1857**: 223;
   (2) *armata*, *Merganetta*, Gould, [March (= 31 March) 1842], *Proceedings of the Zoological Society of London*, **1841**: 95;
   (3) *aurantiiventris*, *Trogon*, Gould, [13 August 1856], *Proceedings of the Zoological Society of London*, **1856**: 107;
   (4) *aurora*, *Helianthea*, Gould, [25 July 1854], *Proceedings of the Zoological Society of London*, **1853**: 61;
   (5) *bennetti*, *Casuarius*, Gould, [28 January 1858], *Proceedings of the Zoological Society of London*, **1857**: 269;
   (6) *caeruleogularis*, *Aulacorhamphus*, Gould, [25 July 1854], *Proceedings of the Zoological Society of London*, **1853**: 45;
   (7) *chrysopterygius*, *Psephotus*, Gould, [12 January 1858], *Proceedings of the Zoological Society of London*, **1857**: 220;

(8) *coronatus, Malurus*, Gould, [12 January 1858], *Proceedings of the Zoological Society of London*, **1857**: 221;

(9) *cyanocollis, Trochilus*, Gould, [25 July 1854], *Proceedings of the Zoological Society of London*, **1853**: 61;

(10) *didiformis, Dinornis*, Owen, [March (= 31 March) 1844], *Proceedings of the Zoological Society of London*, **1843**: 144;

(11) *elephantopus, Dinornis*, Owen, [30 July] 1856, *Proceedings of the Zoological Society of London*, **1856**: 54;

(12) *erythroprocta, Ruticilla*, Gould, [26 June] 1855, *Proceedings of the Zoological Society of London*, **1855**: 78;

(13) *estella, Orthorynchus*, d'Orbigny & Lafresnaye, 1838, *Magasin de Zoologie*, (2)**2**: 32 (specific name of the type species of *Oreotrochilus* Gould, [29 March] 1847, *Proceedings of the Zoological Society of London*, **1847**: 9);

(14) *falconeri, Cygnus*, Parker, [April (= 30 April) 1866], *Proceedings of the Zoological Society of London*, **1865**: 752;

(15) *floriceps, Trochilus*, Gould, [25 July 1854], *Proceedings of the Zoological Society of London*, **1853**: 62;

(16) *frontalis, Acanthiza*, Vigors & Horsfield, 1827, *Transactions of the Linnean Society of London*, **15**: 226 (specific name of the type species of *Sericornis* Gould, April (= 30 April) 1838, *A Synopsis of the Birds of Australia, and the Adjacent Islands*, pt. 4, text to pl. 58);

(17) *fusca, Aplonis*, Gould, [18 October] 1836, *Proceedings of the Zoological Society of London*, **1836**: 73 (specific name of the type species of *Aplonis* Gould, [18 October] 1836, *Proceedings of the Zoological Society of London*, **1836**: 73);

(18) *giganteus, Dinornis*, Owen, [March (= 31 March) 1844], *Proceedings of the Zoological Society of London*, **1843**: 144;

(19) *gracilis, Dinornis*, Owen, [11 April 1855], *Proceedings of the Zoological Society of London*, **1854**: 246;

(20) *hyperythrus, Odontophorus*, Gould, [12 January 1858], *Proceedings of the Zoological Society of London*, **1857**: 223;

(21) *iris, Helianthea*, Gould, [25 July 1854], *Proceedings of the Zoological Society of London*, **1853**: 61;

(22) *irroratus, Dromaeus*, Bartlett, [between July and October (= 31 October)] 1859, *Proceedings of the Zoological Society of London*, **1859**: 205;

(23) *leucogastra, Dendrocitta*, Gould, [5 July] 1833, *Proceedings of the Zoological Society of London*, **1833**: 57 (specific name of the type species of *Dendrocitta* Gould, [5 July] 1833, *Proceedings of the Zoological Society of London*, **1833**: 57);

(24) *mexicana, Meleagris*, Gould, [30 July] 1856, *Proceedings of the Zoological Society of London*, **1856**: 61;

(25) *micropterus, Podiceps*, Gould, [May (= 31 May)] 1868, *Proceedings of the Zoological Society of London*, **1868**: 220;

(26) *micrurus, Calothorax*, Gould, 1 May 1854, *A Monograph of the Trochilidae, or family of humming-birds*, pt. 7 (text to pl. 148 in vol. 3, 1861);

(27) *minima, Excalfactoria*, Gould, [between February and June (= 30 June)] 1859, *Proceedings of the Zoological Society of London*, **1859**: 128;

(28) *minutillus, Chrysococcyx*, Gould, [between February and June (= 30 June)] 1859, *Proceedings of the Zoological Society of London*, **1859**: 128;

(29) *nazarenus, Didus*, Bartlett, [14 June 1854], *Proceedings of the Zoological Society of London*, **1851**: 284;

(30) *notabilis, Nestor*, Gould, [30 July] 1856, *Proceedings of the Zoological Society of London*, **1856**: 94;

(31) *ocellata, Leipoa*, Gould, 1 December 1840, *The Birds of Australia*, pt. 1 (text to pl. 78 in vol. 5, 1848);

(32) *owenii, Apteryx*, Gould, [20 July] 1847, *Proceedings of the Zoological Society of London*, **1847**: 93;

(33) *phainolaema, Heliothrix*, Gould, [26 June] 1855, *Proceedings of the Zoological Society of London*, **1855**: 87;

(34) *purpureiceps, Heliothrix*, Gould, [26 June] 1855, *Proceedings of the Zoological Society of London*, **1855**: 87;

(35) *pusillus, Chordeiles*, Gould, [September (= 30 September)] 1861, *Proceedings of the Zoological Society of London*, **1861**: 182;

(36) *sallaei, Chrysotis*, Sclater, [12 January 1858], *Proceedings of the Zoological Society of London*, **1857**: 224;

(37) *serrirostris, Anser*, Swinhoe, [August (= 31 August)] 1871, *Proceedings of the Zoological Society of London*, **1871**: 417;

(38) *solitarius, Circaetus*, Tschudi, 1844, *Archiv für Naturgeschichte*, **10**: 264 (specific name of the type species of *Urubitornis* Verreaux, [11 November] 1856, *Proceedings of the Zoological Society of London*, **1856**: 145);

(39) *tibetanus, Tetraogallus*, Gould, [25 July 1854], *Proceedings of the Zoological Society of London*, **1853**: 47;

(40) *torquatus, Pedionomus*, Gould, 1 December 1840, *The Birds of Australia*, pt. 1 (text to pl. 80 in vol. 5, 1848) (specific name of the type species of *Pedionomus* Gould, 1 December 1840, *The Birds of Australia*, pt. 1 (text to pl. 80 in vol. 5, 1848));

(41) *veraguensis, Odontophorus*, Gould, [13 August] 1856, *Proceedings of the Zoological Society of London*, **1856**: 107;

(42) *vestita, Ornismya*, Lesson, 1838, *Revue Zoologique*, Paris, **1**: 314;

(43) *victoriae, Ptiloris*, Gould, [January to June (= 30 June) 1850], *Proceedings of the Zoological Society of London*, **1849**: 111;

(44) *viola, Heliangelus*, Gould, 1 May 1853, *A Monograph of the Trochilidae, or family of humming-birds*, pt. 5 (text to pl. 241 in vol. 4, 1861);

(45) *v-nigrum, Somateria*, G.R. Gray, [5 February 1856], *Proceedings of the Zoological Society of London*, **1855**: 212;

(5) to emend the entry on the Official List of Specific Names in Zoology for the specific name of *Semioptera wallacii* G.R. Gray to record date and place of publication to be between July and October (= 31 October) 1859, *Proceedings of the Zoological Society of London*, **1859**: 130;

(6) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following generic names:

(1) *Aplornis* Gould, 1 or 3 October 1836, *The Analyst*, **17**: 152, as suppressed in 8(1)(a)(1) above;
(2) *Atricha* Gould, 27 January 1844, *The Athenaeum*, no. 848: 90, as suppressed in 8(1)(a)(2) above;
(3) *Atrichia* Gould, 1 March 1844, *The Birds of Australia*, pt. 14 (text to pl. 34 in vol. 3, 1848) (a junior homonym of *Atrichia* Schrank, 1803);
(4) *Dendrochetta* Gould, 18 May 1833, *The Literary Gazette*, no. 852: 313, as suppressed in 8(1)(a)(3) above;
(5) *Eriopus* Gould, [13 April] 1847, *Proceedings of the Zoological Society of London*, **1847**: 16 (a junior homonym of *Eriopus* Treitschke, 1825);
(6) *Nyctidus* Gould, 18 November 1837, *The Athenaeum*, no. 525: 851, as suppressed in 8(1)(a)(4) above;

(7) to emend the entry on the Official Index of Rejected and Invalid Generic Names in Zoology for *Semeioptera* G.R. Gray, 26 March 1859, *The Athenaeum*, no. 1639: 425 and *The Literary Gazette*, no. 39(n.s.): 406 to record its suppression in 8(1)(a)(5) above for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(8) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following specific names first published in combination with the generic name shown:
(1) *ealconeri, Cygnus*, Parker, 23 December 1865, *The Athenaeum*, no. 1991: 893, as suppressed in 8(1)(c)(1) above;
(2) *pectoralis, Nyctidus*, Gould, 18 November 1837, *The Athenaeum*, no. 525: 851, as suppressed in 8(1)(c)(2) above;
(3) *thibetanus, Tetraogallus*, Gould, 26 March 1853, *The Literary Gazette*, no. 1888: 307, as suppressed in 8(1)(c)(3) above;

(9) to emend the entry on the Official Index of Rejected and Invalid Specific Names in Zoology for *Semeioptera wallacei* G.R. Gray, 26 March 1859, *The Athenaeum*, no. 1639: 425 and *The Literary Gazette*, no. 39(n.s.): 406 to record its suppression in 8(1)(c)(4) above for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

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Comment on the proposed designation of *Anomalina ariminensis* d'Orbigny in Fornasini, 1902 as the type species of *Anomalina* d'Orbigny, 1826 (Foraminiferida)
(Case 2906; see BZN **54**: 6–10)

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I fully support Stefan Revets's application to designate *Anomalina ariminensis* d'Orbigny in Fornasini, 1902 as the type species of *Anomalina* d'Orbigny, 1826, rather than the indeterminate nominal species *A. punctulata* d'Orbigny, 1826, on the grounds explained in Revets's text. Approval by the Commission will add to future stability in the nomenclature of the smaller benthic foraminifera. The proposal is supported by an extensive monograph (Revets, 1996b) setting modern standards in this neglected and difficult group of foraminifera.

The application is clearly written, to the point and accurate. I recommend its approval as it stands.

Comment on the proposed conservation of *Umbellula* Cuvier, [1797] (Cnidaria, Anthozoa) as the correct original spelling, and corrections to the entries relating to *Umbellularia* Lamarck, 1801 on the Official Lists and Indexes of Names in Zoology
(Case 2999; see BZN **54**: 14–18)

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I would like to make the following comment on the recent application by Dr F.M. Bayer and Dr M. Grasshoff. I fully support the proposal to retain the existing spelling, *Umbellula*. The spelling *Ombellula* is virtually unused; as Collection Manager of the Cnidaria collections of The Natural History Museum, London I have been familiar with the spelling *Umbellula* for more than 25 years and have never encountered *Ombellula* either in dealing with the collections or in the literature. The proposal by Williams (1995) to adopt the spelling *Ombellula* was reckless, and this name should be suppressed at the earliest opportunity. Such a totally unpragmatic proposal as Williams's causes unwarranted confusion and timewasting and, if allowed to succeed, would denigrate nomenclature and the Commission itself.

Comment on the proposed suppression for nomenclatural purposes of S.D. Kaicher's *Card Catalogue of World-Wide Shells* (1973–1992)
(Case 2964; see BZN **53**: 96–98, 273–277; **54**: 39–46)

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I have followed the debate on Kaicher's *Card Catalogue* and was a little surprised at the reactions when I read the comments in BZN **54**: 39–46 (March 1997).

I discussed the problem of figuring type material with Mrs Kaicher long ago because she was interested in figuring some type material I then had on loan from the Smithsonian Institution. She explained to me very clearly that her intention was not to interfere with taxonomic procedures, only to figure accurately as many different species as possible. Furthermore, she liked to figure type material when difficult groups were involved (in my case gastropods of the family EULIMIDAE). The reason for this was that if she did so it was more likely that her photographs would show the right species. The reason was not the other way round, i.e. that her cards should set the standard for interpretation of the name.

To suppress the *Card Catalogue* for nomenclatural purposes does not in any way reduce Kaicher's very useful contribution to identification of molluscs and cannot be considered disrespectful to an amateur who has contributed more in this field than most professionals.

Comment on the proposed conservation of the names *Geopeltis* Regteren Altena, 1949, *Geoteuthis* Münster, 1843, *Jeletzkyteuthis* Doyle, 1990, *Loligosepia* Quenstedt, 1839, *Parabelopeltis* Naef, 1921, *Paraplesioteuthis* Naef, 1921 and *Belemnotheutis montefiorei* Buckman, 1880 (Mollusca, Coleoidea)

(Case 2987; see BZN **53**: 253–260; **54**: 104)

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There are no doubts among coleoid researchers that the complex taxonomic meaning of *Belemnosepia* Buckland & Agassiz in Buckland, 1836 urgently needs to be resolved by the Commission. This is the intention of the application by Engeser & Donovan and it has my support.

On a point of detail, Engeser & Donovan state in their application (p. 256) that 'No type species has ever been validly designated for *Belemnosepia*. Six of the species attributed to *Belemnosepia* by d'Orbigny are type species or subjective synonyms of other genera ...', and they then list *Geopeltis* Regteren Altena, 1949, *Geoteuthis* Münster, 1843, *Jeletzkyteuthis* Doyle, 1990, *Loligosepia* Quenstedt, 1839, *Parabelopeltis* Naef, 1921 and *Paraplesioteuthis* Naef, 1921. No nominal species were originally included in *Belemnosepia* by Buckland & Agassiz. Article 69a(1)1 of the Code states that 'If no nominal species was included at the time the nominal genus or subgenus was established, the nominal species that were first subsequently and expressly included in it ... are deemed to be the only originally included nominal species'. It could be argued that the type species of *Belemnosepia* must be one of the species illustrated by Buckland (1836b of Engeser & Donovan's references) in pl. 44' which is headed 'Illustrations of the genus *Belemnosepia*'. However, this argument cannot be sustained since the text explanation of pl. 44' is headed 'Illustrations of the probable nature of the animals that gave origin to Belemnites' and includes the living *Sepia officinalis* Linnaeus, 1758. From my point of view the nominal species listed were 'expressly' included in *Belemnosepia*.

A footnote written by Agassiz to the explanation of pl. 44" of his German translation (Buckland, 1838) of Buckland's 1836b book establishes the name *Atramentarius* for the ink-sac illustrated in fig. 7, which Engeser & Donovan (1996, p. 255) state is recognizable as *Belemnoteuthis montefiorei* Buckman, 1880. Donovan & Crane (1992, p. 280) pointed out that the correct original spelling of the generic name customarily spelled *Belemnoteuthis* is *Belemnotheutis* Pearce, 1842 (p. 593); I followed the original spelling in my *Fossilium Catalogus* (Riegraf, 1995, p. 27). *Atramentarius* Buckland & Agassiz in Buckland, 1838 is a senior synonym of *Belemnotheutis*, a name which (as *Belemnoteuthis*) is in current usage (references cited by Engeser & Donovan, p. 254). I therefore propose that the Commission be asked to suppress the nominal genus *Atramentarius* in order to conserve *Belemnotheutis* Pearce, 1842 (type species by subsequent monotypy by Pearce (1847, pls. 15–16) *Belemnoteuthis* [sic] *antiquus* Pearce, 1847, pls. 15-16).

The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the name *Atramentarius* Buckland & Agassiz in Buckland, 1838 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the name *Belemnotheutis* Pearce, 1842 (gender: feminine), type species by subsequent monotypy (Pearce, 1847) *Belemnoteuthis antiqua* Pearce, 1847;

(3) to place on the Official List of Specific Names in Zoology the name *antiqua* Pearce, 1847, as published in the binomen *Belemnoteuthis antiquus* [recte *antiqua*] (specific name of the type species of *Belemnotheutis* Pearce, 1842);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:

(a) *Atramentarius* Buckland & Agassiz in Buckland, 1838, as suppressed in (1) above;

(b) *Belemnoteuthis* Pearce, 1847 (unavailable as an incorrect subsequent spelling of *Belemnotheutis*).

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Comments on the proposed designation of *Foenus unguiculatus* Westwood, 1841 as the type species of *Pseudofoenus* Kieffer, 1902 (Insecta, Hymenoptera)

(Case 2950; see BZN **53**: 261–263)

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The applicants have referred to my past work on GASTERUPTERIIDAE and, since I retain an interest in this family, I should like to contribute a comment on this case. In essence I ask the Commission to reject the application in its present form.

I agree that in the unusual situation described by A.D. Austin, J.T. Jennings and M.S. Harvey some Commission action is desirable. However, I do not think they have provided adequate background for a Commission decision, nor do I think that their solution is a wise one; it leaves the identity of *Gasteruption pedunculatum* Schletterer, 1889 unresolved when this is the crux of the matter to be settled. To pick a new type species for *Pseudofoenus* and leave the old one in limbo largely defeats the object.

The first point (nomenclatural) to establish is the status of the surviving specimen (male) of *G. pedunculatum* in the Berlin Museum. Jennings & Austin (1994, pp. 1301–1302) referred to this as the holotype but, as stated in para. 3 of the application, there must have been at least two original specimens because Schletterer wrote: 'Type in königl. naturhistorischen Museum zu Berlin und im naturhistorischen Museum zu Zürich'. The Berlin specimen clearly has syntype status. In a practical sense it is useless as the gaster is missing. The second noteworthy point (taxonomic) is that Schletterer was very doubtful whether his *pedunculatum* was really a new species; he wrote (p. 468) '*F. unguiculatus* Westw. ist sehr wahrscheinlich identisch mit *pedunculatum*' and immediately under the species heading gave the possible synonymy in the form '? *Foenus unguiculatus* Westw., Ann. Nat. Hist., T. VII, p. 537, ♂ . . . 1841' (Westwood was in error as to the sex; the original specimen was in fact female).

To circumvent the present major weakness (*G. pedunculatum* still left as a nomen dubium) it seems clear to me that the application should be revised. The Commission should be asked to set aside the useless *pedunculatum* syntype and designate a neotype for this nominal species. As nothing prevents designation of neotypes of opposite sex from that of original types (Article 75d(4) of the Code), the chosen neotype specimen should be a female. Furthermore, it should be a female of *Pseudofoenus unguiculatus* (Westwood), as the female of this species has a known identity from its holotype. This way, four things take place at once: the identity of *G. pedunculatum* is fixed, the synomymy of *pedunculatum* with *unguiculatus* is established, the same taxonomic species is kept as the type of *Pseudofoenus*, and the action is in accord with Schletterer's originally suspected synonymy of the two nominal species. The nominal type species remains unchanged as *G. pedunculatum* although its name is synonymous with the earlier *F. unguiculatus*.

If the holotype of *unguiculatus* is in good enough condition the best course would be for the Commission to designate it as a neotype for *pedunculatum*, thereby establishing objective synonymy. If not, then subjective synonymy by use of a recently collected specimen will suffice.

(2) A.D. Austin & J.T. Jennings

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M.S. Harvey

Western Australian Museum, Francis Street, Perth, Western Australia 6000, Australia

We wish to reply to Roger Crosskey's comment (above) on our application. His proposal raises some interesting issues over what we thought would be a straightforward application. After considering his comments at some length we believe his proposal to be overly complex compared with ours. There are undoubtedly numerous solutions to this problem but we do not think that Crosskey's is the best one.

The basis of Crosskey's solution rests on the fact that Schletterer suspected *G. pedunculatum* and *F. unguiculatus* might be the same species. However, there is absolutely no validity in this and we are surprised that Crosskey gives it any credence — it is based on Schletterer's view of over 100 years ago. He had little or no understanding of the taxonomy of the group compared to present-day concepts; he probably did not inspect any specimens other than his own (of which he possibly had two), and hence relied on Westwood's description which was so brief as to be meaningless. If we were to propose such an artificial synonymy there would be a very good chance that we would be synonymising historically different species because the existing type of *G. pedunculatum* lacks the diagnostic genitalia to accurately associate it with any taxonomic species.

Crosskey is correct that we (Jennings & Austin, 1994) erroneously listed the specimen of *pedunculatus* as the holotype when there were apparently at least two syntypes, but the second specimen has never been located by any author since Schletterer. We have made an extensive attempt to find it, without success, including one of us visiting all likely European collections.

Our solution to the problem, designating *Foenus unguiculatus* Westwood, 1841 as the type species of *Pseudofoenus*, has the distinct advantage that the type species would be denoted by the oldest available name. Certainly the name *G. pedunculatum* would remain a nomen dubium but, since it is inevitably invalid as a junior synonym of either *F. unguiculatus* or of *F. crassipes* Smith, 1876, this presents no problem.

For this reason we firmly believe that Crosskey's approach is unnecessarily complicated.

Comment on the proposed conservation of the names *Labrus* Linnaeus, 1758, *Cichlasoma* Swainson, 1839 and *Polycentrus* Müller & Troschel, 1849 by the designation of neotypes for *Labrus bimaculatus* Linnaeus, 1758 and *L. punctatus* Linnaeus, 1758 (Osteichthyes, Perciformes)
(Cases 2880 and 2905; see BZN **50**: 215-218 and **53**: 106 111; **54**: 106–116)

Hans-J. Paepke

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In BZN **54**: 109–115 (June 1997) Dr Sven Kullander has contributed a considerable number of interesting arguments to the discussion on the names *Labrus punctatus* Linnaeus, 1758 and *Polycentrus schomburgkii* Müller & Troschel, 1849. I cannot agree, however, with his suggestion that the proposals I made in Case 2880 (published in BZN **50**: 215–218) should be set aside until a systematic revision of the genus *Polycentrus* has been carried out. I understand his endeavour to retain the Linnaean name *punctatus* but, since the well known name *schomburgkii* has been used in favour

of the completely disregarded senior name, and has remained unchallenged in use for 134 years (from 1849 to 1983), I wish to stand by my proposal to conserve the name *schomburgkii*. The nomenclatural stability of *schomburgkii* has been supported by Drs Fricke & Ferraris (Case 2905, published in **53**: 106–111) and by Professor Reeve Bailey in his comment on these cases (BZN **54**: 106–109).

Kullander (BZN **54**: 110) doubts that the name *schomburgkii* merits protection. I have therefore surveyed the frequency with which the name has been used in the literature for Schomburgk's leaf fish in the last 50 years (1947–1997) compared with that of *punctatus*. Including the references which I cited in my application (BZN **50**: 216, 217), I found that the name *schomburgkii* (sometimes incorrectly written '*schomburgki*') has been used as valid in at least 54 publications by 53 authors during that time (I have given a list to the Commission Secretariat). Kullander has already pointed out that the taxon is referred to in aquarium and behaviour articles and books, and the name is therefore well known to the public. Many of the popular science publications I have listed are in German; it is to be expected that there is additional literature in other languages. In contrast, the name *punctatus* has been used only by Kullander (1983), Nelson (1984) and Stawikowski (1992).

Referring in his comment (BZN **54**: 110) to freshwater fish in Guiana, Kullander followed Kullander & Nijssen (1989) in recording that 'there is considerable diversity, with closely related species replacing each other in parallel river drainages'. It is thus of significance to note that the type locality of *P. schomburgkii* is the Essequibo river drainage in the former British Guiana, whilst the type locality of *Labrus punctatus* was given by Linnaeus (1758) as 'Surinami' in the former Dutch Guiana, another region of Guiana. It is conceivable that in the future *P. schomburgkii* and *L. punctatus* may turn out to be distinct taxa and in view of this I now propose to revise my application to request that the name *schomburgkii* Müller & Troschel, 1849 be given precedence over *punctatus* Linnaeus, 1758, rather than that *punctatus* be suppressed, so that the latter can continue to be of use, if required, as a specific or subspecific name. If this revised proposal is approved by the Commission both names will be placed on the Official List.

Kullander (BZN **54**: 110, para. (4)) pointed out that '*L. punctatus* has been considered the type species of both *Polycentrus* Müller & Troschel, 1849 and *Cichlasoma* Swainson, 1839'. Under the Code (Article 68), *P. schomburgkii* is, of course, the type species of *Polycentrus* and has been cited as such by Kullander (1983, p. 84), Eschmeyer & Bailey (1990, p. 325), and Fricke & Ferraris in their application (BZN **53**: 107).

The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to rule that the specific name *schomburgkii* Müller & Troschel, 1849, as published in the binomen *Polycentrus schomburgkii*, is to be given precedence over the name *punctatus* Linnaeus, 1758, as published in the binomen *Labrus punctatus*;

(2) to place on the Official List of Specific Names in Zoology the following names:
   (a) *schomburgkii* Müller & Troschel, 1849, as published in the binomen *Polycentrus schomburgkii* and as defined by the syntypes in the Zoological Museum of the Humboldt-University of Berlin, with the endorsement that it is to be given precedence over the name *punctatus* Linnaeus, 1758, as

published in the binomen *Labrus punctatus*, whenever the two names are considered to be synonyms;

(b) *punctatus* Linnaeus, 1758, as published in the binomen *Labrus punctatus* and as defined by the lectotype (specimen no. NRM 4 in the Swedish Museum of Natural History, Stockholm) designated by Kullander (1983), with the endorsement that it is not to be given priority over the name *schomburgkii* Müller & Troschel, 1849, as published in the binomen *Polycentrus schomburgkii*, whenever the two names are considered to be synonyms.

Comment on the proposed conservation of usage of 15 mammal specific names based on wild species which are antedated by or contemporary with those based on domestic animals

(Case 3010; see BZN **53**: 28–37, 125, 192–200, 286–288; **54**: 119–129)

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I am in full support of the application by A. Gentry, J. Clutton-Brock and C.P. Groves, published in BZN **53**: 28–37 (March 1996). As both a zoologist and an archaeozoologist I am very glad of this application and do hope that it will be approved by the Commission.

The specific names of *Bos* (currently *Bubalus*) *arnee*, *B. gaurus*, *B. primigenius*, *Poephagus* (currently *Bos*) *mutus*, *Capra aegragrus*, *Ovis orientalis*, *Camelus ferus*, *C.* (currently *Lama*) *guanicoe*, *C.* (currently *Vicugna*) *vicugna*, *Equus africanus*, *E. ferus*, *Canis lupus*, *Mustela putorius*, *Felis silvestris* and *Cavis aperea*, which were originally based on wild animals, are antedated by or contemporary with names based on the domestic derivatives of the wild species. A tradition has arisen under which a number of wild and domesticated forms are separately named, and the listed 15 names have almost consistently been applied to the wild species. For this reason the application to conserve the usage of these names is undoubtedly in the interest of stability and clarity in the nomenclature. Therefore, it would certainly be helpful and desirable for the Commission to approve the proposal. Its implementation would not only lead to greater stability in the nomenclature of wild animals, but would also be a good action towards regularizing and simplifying the nomenclature of domestic animals. Personally I am in favour of the concept of excluding domesticated forms from their ancestral wild species and labelling them with distinct names of full specific rank based on domestic animals.

OPINION 1875

Hapalotrema Looss, 1899 (Digenea): *Hapalotrema loossi* Price, 1934 designated as the type species

Keywords. Nomenclature; taxonomy; Trematoda; Digenea; *Hapalotrema*; *Hapalotrema loossi*; *Hapalotrema mistroides*.

Ruling

(1) Under the plenary powers all previous fixations of type species for the nominal genus *Hapalotrema* Looss, 1899 are hereby set aside and *Hapalotrema loossi* Price, 1934 is designated as the type species.

(2) The name *Hapalotrema* Looss, 1899 (gender: neuter), type species by designation under the plenary powers in (1) above *Hapalotrema loossi* Price, 1934, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *mistroides* Monticelli, 1896, as published in the binomen *Mesogonimus mistroides* (senior subjective synonym of the specific name of *Hapalotrema loossi* Price, 1934, the type species of *Hapalotrema* Looss, 1899), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *europaeus* Price, 1934, as published in the binomen *Learedius europaeus*, is hereby placed on the Official Index of Specific Names in Zoology (a junior objective synonym of *Distoma constrictum* Leared, 1862).

History of Case 2932

An application to conserve the usage of the name *Hapalotrema* Looss, 1899 by the designation of *Hapalotrema loossi* Price, 1934 as the type species of the genus was received from Dr Thomas R. Platt (*Saint Mary's College, Notre Dame, Indiana, U.S.A.*) and Dr David Blair (*James Cook University, Townsville, Queensland, Australia*) on 30 March 1994. After correspondence the case was published in BZN **53**: 89–91 (June 1996). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the specific name of *Learedius europaeus* Price, 1934 is an unnecessary replacement name (junior objective synonym) of *Distoma constrictum* Leared, 1862 (paras. 6 and 7 of the application). It was proposed that this name be placed on the Official Index.

It was also noted that Stiles & Hassall (1908) and the authors of the application (paras. 5 and 9) considered *Mesogonimus mistroides* Monticelli, 1896 to be taxonomically indistinguishable from *Hapalotrema loossi* Price, 1934. These nominal species were described from the same host (the loggerhead turtle *Thalassochelys caretta* (Linnaeus, 1758)) in different localities. On approval of the application by the Commission, the type species of *Hapalotrema* Looss, 1899 would formally be *H. loossi*, but the valid specific name for the taxon, and that to be placed on the Official List, is *H. mistroides*. The name *H. loossi* would be available for use by any worker who disagreed with the synonymy.

Decision of the Commission

On 1 March 1997 the members of the Commission were invited to vote on the proposals published in BZN **53**: 90–91. At the close of the voting period on 1 June 1997 the votes were as follows:

Affirmative votes — 21: Bock, Brothers, Cocks, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Papp, Patterson, Ride, Savage, Song, Štys

Negative votes — 1: Schuster.

Bouchet abstained.

No votes were received from Cogger and Dupuis.

Mawatari was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

europeaus, *Learedius*, Price, 1934, *Journal of the Washington Academy of Sciences*, **24**: 138.

Hapalotrema Looss, 1899, *Zoologische Jahrbücher* (Jena), **12**: 656.

mistroides, *Mesogonimus*, Monticelli, 1896, *Internationale Monatsschrift für Anatomie und Physiologie* (Leipzig), **13**: 144.

OPINION 1876

Nygolaimus Cobb, 1913 (Nematoda): *Dorylaimus brachyuris* de Man, 1880 designated as the type species

Keywords. Nomenclature; taxonomy; Nematoda; *Nygolaimus*; *Dorylaimus brachyuris*; soil nematodes.

Ruling

(1) Under the plenary powers all previous fixations of type species for the nominal genus *Nygolaimus* Cobb, 1913 are hereby set aside and *Dorylaimus brachyuris* de Man, 1880 is designated as the type species.

(2) The name *Nygolaimus* Cobb, 1913 (gender: masculine), type species by designation under the plenary powers in (1) above *Dorylaimus brachyuris* de Man, 1880, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *brachyuris* de Man, 1880, as published in the binomen *Dorylaimus brachyuris* and as defined by the female lectotype (slide no. VAS 254 in the Zoological Museum, University of Amsterdam) designated by Loof (1961) (specific name of the type species of *Nygolaimus* Cobb, 1913), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2927

An application to conserve the usage of the name *Nygolaimus* Cobb, 1913 by the designation of *Dorylaimus brachyuris* de Man, 1880 as the type species of the genus was received from Dr P.A.A. Loof (*Agricultural University, Wageningen, The Netherlands*) and Dr J. Heyns (*Randse Afrikaanse Universiteit, Johannesburg, South Africa*) on 24 January 1994. After correspondence the case was published in BZN **53**: 18–20 (March 1996). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 March 1997 the members of the Commission were invited to vote on the proposals published in BZN **53**: 19. At the close of the voting period on 1 June 1997 the votes were as follows:

Affirmative votes — 23: Bock, Bouchet, Brothers, Cocks, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Papp, Patterson, Ride, Savage, Schuster, Song, Štys

Negative votes — none.

No votes were received from Cogger and Dupuis.

Mawatari was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

brachyuris, *Dorylaimus*, de Man, 1880, *Tijdschrift der Nederlandsche Dierkundige Vereeniging*, **5**: 83.

Nygolaimus Cobb, 1913, *Journal of the Washington Academy of Sciences*, **3**: 441.

The following is the reference for the designation of the lectotype of *Dorylaimus brachyuris* de Man, 1880:

Loof, P.A.A. 1961. *Beaufortia*, **8**: 239.

OPINION 1877

D.L.G. Karsten (1789), *Museum Leskeanum*, vol. 1 (Regnum Animale): suppressed for nomenclatural purposes

Keywords. Nomenclature; taxonomy; D.L.G. Karsten; *Museum Leskeanum* (1789); Mollusca.

Ruling

(1) Under the plenary powers the work by D.L.G. Karsten (1789) entitled *Museum Leskeanum, regnum animale, quod ordine systematico* is hereby suppressed for nomenclatural purposes.

(2) The above work is hereby placed on the Official Index of Rejected and Invalid Works in Zoological Nomenclature.

History of Case 2962

An application for the suppression for nomenclatural purposes of the work by D.L.G. Karsten (1789) entitled *Museum Leskeanum*, vol. 1, was received from Dr G. Rosenberg (*Academy of Natural Sciences, Philadelphia, Pennsylvania, U.S.A.*) on 12 January 1995. After correspondence the case was published in BZN **53**: 38–42 (March 1996). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that a number of comments in support had been received before submission of the application (para. 8).

Decision of the Commission

On 1 March 1997 the members of the Commission were invited to vote on the proposals published in BZN **53**: 42. At the close of the voting period on 1 June 1997 the votes were as follows:

Affirmative votes – 22: Bock, Brothers, Cocks, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Papp, Patterson, Ride, Savage, Schuster, Song, Štys

Negative votes — 1: Bouchet.

No votes were received from Cogger and Dupuis.

Mawatari was on leave of absence.

Bouchet commented: 'I do not think that Karsten's names should displace junior synonyms when those are in current use. However, when Karsten (1789) merely represents an early validation of Martini & Chemnitz names or figures, later validated under the same name by Gmelin (1791) or Röding (1798), then Karsten (1789) should be cited as the author and date and no nomenclatural instability will be caused'.

Original reference

The following is the original reference to the work placed on an Official Index by the ruling given in the present Opinion:

Karsten, D.L.G. 1789. *Museum Leskeanum, regnum animale, quod ordine systematico.*

OPINION 1878

Paraphronima crassipes Claus, 1879 (Crustacea, Amphipoda): specific name conserved

Keywords. Nomenclature; taxonomy; Amphipoda; *Paraphronima crassipes*; pelagic amphipods.

Ruling

(1) Under the plenary powers the specific name *pedestris* Guérin-Méneville, 1836, as published in the binomen *Hyperia pedestris*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *crassipes* Claus, 1879, as published in the binomen *Paraphronima crassipes*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *pedestris* Guérin-Méneville, 1836, as published in the binomen *Hyperia pedestris* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2952

An application for the conservation of the specific name of *Paraphronima crassipes* Claus, 1879 was received from Dr Wolfgang Zeidler (*South Australian Museum, Adelaide, South Australia*) on 12 September 1994. After correspondence the case was published in BZN **52**: 310 312 (December 1995). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 December 1996 the members of the Commission were invited to vote on the proposals published in BZN **52**: 311. At the close of the voting period on 1 March 1997 the votes were as follows:

Affirmative votes — 19: Bock, Bouchet, Brothers, Cocks, Dupuis, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Macpherson, Martins de Souza, Mawatari, Minelli, Nye, Papp, Patterson, Schuster, Song

Negative votes — 3: Lehtinen, Mahnert and Štys.

No votes were received from Cogger, Nielsen and Savage.

Ride was on leave of absence.

Mahnert commented: 'In this case priority should apply since the taxon seems to be without interest to non-specialists of Amphipoda. The recent references that are cited are highly specialized'. Štys commented: 'Why should we support the suppression of the specific name of *Hyperia pedestris* which is not a threat, at least at the moment? The author of the application has noted twice that the synonymy with *Paraphronima crassipes* is only 'most likely''.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

crassipes, *Paraphronima*, Claus, 1879, *Arbeiten aus dem Zoologischen Institut der Universitäte Wien*, **2**: 65.

pedestris, *Hyperia*, Guérin-Méneville, 1836, *Iconographie du Règne Animal de G. Cuvier*, vol. 2, Crustacés, pl. 25, fig. 6.

OPINION 1879

Cacoxenus indagator Loew, 1858 (Insecta, Diptera): generic and specific names conserved

Keywords. Nomenclature; taxonomy; Diptera; AGROMYZIDAE; DROSOPHILIDAE; *Cacoxenus*; *Domomyza*.

Ruling

(1) Under the plenary powers the following names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
   (a) the generic name *Domomyza* Rondani, 1856;
   (b) the specific name *cincta* Rondani, 1856, as published in the binomen *Domomyza cincta*.

(2) The name *Cacoxenus* Loew, 1858 (gender: masculine), type species by monotypy *Cacoxenus indagator* Loew, 1858, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *indagator* Loew, 1858, as published in the binomen *Cacoxenus indagator* (specific name of the type species of *Cacoxenus* Loew, 1858), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Domomyza* Rondani, 1856, as suppressed in (1)(a) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

(5) The name *cincta* Rondani, 1856, as published in the binomen *Domomyza cincta* and as suppressed in (1)(b) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2937

An application for the conservation of the generic and specific names of *Cacoxenus indagator* Loew, 1858 was received from Dr Vasily S. Sidorenko (*Institute of Biology and Pedology, Far Eastern Division of the Russian Academy of Sciences, Vladivostok, Russia*) on 20 May 1994. After correspondence the case was published in BZN **53**: 21–23 (March 1996). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 March 1997 the members of the Commission were invited to vote on the proposals published in BZN **53**: 22. At the close of the voting period on 1 June 1997 the votes were as follows:

Affirmative votes — 22: Bock, Bouchet, Brothers, Cocks, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Papp, Patterson, Ride, Savage, Schuster, Song

Negative votes — 1: Štys.

No votes were received from Cogger and Dupuis.

Mawatari was on leave of absence.

Štys commented: 'The usage of the name *Domomyza* Rondani, 1856 is poorly documented and it is not clear whether the case meets the requirements of Article 79 of the Code'.

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

Cacoxenus Loew, 1858, *Wiener Entomologischen Monatsschrift*, **2**: 217.

cincta, *Domomyza*, Rondani, 1856, *Dipterologiae italicae prodromus. 1. Genera italica ordinis Dipterorum ordinatim disposita et distincta et in families et stirpes aggregata*, p. 121.

Domomyza Rondani, 1856, *Dipterologiae italicae prodromus. 1. Genera italica ordinis Dipterorum ordinatim disposita et distincta et in families et stirpes aggregata*, p. 121.

indagator, *Cacoxenus*, Loew, 1858, *Wiener Entomologischen Monatsschrift*, **2**: 218.

OPINION 1880

PLUTONIINAE Bollman, 1893 (Arthropoda, Chilopoda): spelling emended to PLUTONIUMINAE, so removing the homonymy with PLUTONIINAE Cockerell, 1893 (Mollusca, Gastropoda)

Keywords. Nomenclature; taxonomy; Gastropoda; Chilopoda; Trilobita; PLUTONIINAE; PLUTONIUMINAE; *Plutonia*; *Plutonium*.

Ruling

(1) Under the plenary powers it is hereby ruled that for the purposes of Article 29 of the Code the stem of the generic name *Plutonium* Cavanna, 1881 (Chilopoda) is PLUTONIUM-.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:
   (a) *Plutonia* Morelet in Stabile, 1864 (gender: feminine), type species by monotypy *Viquesnelia atlantica* Morelet, 1860 (Gastropoda);
   (b) *Plutonium* Cavanna, 1881 (gender: neuter), type species by monotypy *Plutonium zwierleini* Cavanna, 1881 (Chilopoda).

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:
   (a) *atlantica* Morelet, 1860, as published in the binomen *Viquesnelia atlantica* (specific name of the type species of *Plutonia* Morelet in Stabile, 1864) (Gastropoda);
   (b) *zwierleini* Cavanna, 1881, as published in the binomen *Plutonium zwierleini* (specific name of the type species of *Plutonium* Cavanna, 1881) (Chilopoda).

(4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:
   (a) PLUTONIINAE Cockerell, 1893, type genus *Plutonia* Morelet in Stabile, 1864 (Gastropoda);
   (b) PLUTONIUMINAE Bollman, 1893, type genus *Plutonium* Cavanna, 1881 (spelling emended by the ruling in (1) above) (Chilopoda);

(5) The name *Plutonia* Hicks, 1871 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (a junior homonym of *Plutonia* Morelet in Stabile, 1864) (Trilobita).

(6) The name PLUTONIINAE Bollman, 1893 is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology (spelling emended to PLUTONIUMINAE by the ruling in (1) above) (Chilopoda).

History of Case 2946

An application to remove the homonymy between the family-group names PLUTONIINAE Cockerell, 1893 (based on the gastropod generic name *Plutonia* Morelet in Stabile, 1864) and PLUTONIINAE Bollman, 1893 (based on the chilopod generic name *Plutonium* Cavanna, 1881) was received from Dr Rowland M. Shelley (*North Carolina State Museum of Natural Sciences, Raleigh, North Carolina, U.S.A.*) and

Dr Thierry Backeljau (*Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussels, Belgium*) on 15 August 1994. After correspondence the case was published in BZN **52**: 150–152 (June 1995). Notice of the case was sent to appropriate journals.

The authors of the application proposed that the homonymy between the family-group names should be removed by emending Cockerell's mollusc name (which they believed to be the junior homonym) to PLUTONIAINAE. A comment from Dr Philippe Bouchet (*Muséum National d'Histoire Naturelle, Paris, France*), published in BZN **53**: 120 (June 1996), pointed out that, in contrast to statements in the application (para. 2), PLUTONIINAE Cockerell was the senior homonym.

Drs Backeljau & Shelley (BZN **53**: 120) revised their application to propose that the chilopod name be emended to PLUTONIUMINAE, whilst leaving the mollusc name unchanged. The revised proposals were offered for voting.

Decision of the Commission

On 1 December 1996 the members of the Commission were invited to vote on the proposals published in BZN **53**: 120. At the close of the voting period on 1 March 1997 the votes were as follows:

Affirmative votes — 21: Bock, Bouchet, Brothers, Cocks, Eschmeyer, Heppell, Kabata, Kerzhner, Lehtinen, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Nye, Papp, Patterson, Savage, Schuster, Song

Negative votes — 2: Kraus and Štys.

Dupuis abstained.

No vote was received from Cogger.

Ride was on leave of absence.

Voting for, Bouchet commented: 'It would have been more elegant if the stem of *Plutonium* had been ruled to be PLUTON-, hence PLUTONINAE, rather than the grammatically barbaric PLUTONIUM-'. Voting against, Kraus commented: 'Cockerell's family-group name has just one month's priority over Bollman's but both names are more than a hundred years old. Hence, 'priority' should not be used as a decisive argument in this case. The applicants did not even mention usage, a much more important consideration. *Plutonia* is known only from the Azores and there is limited specialized literature on this slug, whereas *Plutonium* is a genus of scolopendromorph chilopods much more widely distributed (in the Mediterranean), the morphological characteristics of which have played a rôle in various discussions on phylogenetic relationships within the Chilopoda. Accordingly, the proposal presented in the original application was preferable'. Štys commented: 'If the original proposal to change the name of the gastropod subfamily had been retained I would have voted for it. I cannot support the revised proposal since it has been modified on grounds of priority which do not apply in this case'. Abstaining, Dupuis commented: 'I refuse to vote on this case because in my personal view the time between the last comment and the distribution of voting papers was too short. The last comment was less than one year old'. [*Editorial note*. The comment was from the authors of the application. An explanation of procedure followed in sending cases for voting was given on BZN **54**: 53–54, March 1997].

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

atlantica, *Viquesnelia*, Morelet, 1860, *Iles Açores. Notice sur l'histoire naturelle des Açores suivie d'une description des mollusques terrestres de cet Archipel*, p. 139.

Plutonia Hicks, 1871, *Quarterly Journal of the Geological Society*, **27**(1): 399.

Plutonia Morelet, 1864, *in* Stabile, J., *Atti della Società Italiana di Scienze Naturali*, **7**: 121.

PLUTONIINAE Bollman, 1893, *United States National Museum Bulletin*, **46**: 165, 168 (a now incorrect original spelling of PLUTONIUMINAE).

PLUTONIINAE Cockerell, 1893, *The Conchologist*, **2**(7): 186.

Plutonium Cavanna, 1881, *Bollettino della Società Entomologica Italiana*, **13**: 169.

PLUTONIUMINAE Bollman, 1893, *United States National Museum Bulletin*, **46**: 165, 168 (spelled as PLUTONIINAE, now incorrect).

zwierleini, *Plutonium*, Cavanna, 1881, *Bollettino della Società Entomologica Italiana*, **13**: 169.

OPINION 1881

Stilpon Loew, 1859 (Insecta, Diptera): conserved

Keywords. Nomenclature; taxonomy; Diptera; *Agatachys*; *Stilpon*.

Ruling

(1) Under the plenary powers the name *Agatachys* Meigen, 1830 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Stilpon* Loew, 1859 (gender: masculine), type species by subsequent designation by Loew (1864) *Tachydromia graminum* Fallén, 1815, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *graminum* Fallén, 1815, as published in the binomen *Tachydromia graminum* (specific name of the type species of *Stilpon* Loew, 1859), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Agatachys* Meigen, 1830, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2974

An application for the conservation of the name *Stilpon* Loew, 1859 was received from Dr Jeffrey M. Cumming (*Centre for Land and Biological Resources Research, Agriculture and Agri-Food Canada, C.E.F., Ottawa, Ontario, Canada*) and Dr Neal L. Evenhuis (*J. Linsley Gressitt Center for Research in Entomology, Bishop Museum, Honolulu, Hawaii, U.S.A.*) on 27 March 1995. After correspondence the case was published in BZN **53**: 104–105 (June 1996). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 March 1997 the members of the Commission were invited to vote on the proposals published in BZN **53**: 105. At the close of the voting period on 1 June 1997 the votes were as follows:

Affirmative votes — 22: Bock, Brothers, Cocks, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Papp, Patterson, Ride, Savage, Schuster, Song, Štys

Negative votes — none.

Bouchet abstained.

No votes were received from Cogger and Dupuis.

Mawatari was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Agatachys Meigen, 1830, *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*, Theil 6, p. 343.

graminum, *Tachydromia*, Fallén, 1815, *Empidiae Sveciae*, p. 15.

Stilpon Loew, 1859, *Programm der Königlichen Realschule zu Meseritz*, **1859**: 35.

The following is the reference for the designation of *Tachydromia graminum* Fallén, 1815 as the type species of the nominal genus *Stilpon* Loew, 1859:

Loew, H. 1864. *Zeitschrift für Entomologie* (Breslau), **14** (for 1860): 5.

OPINION 1882

Dialictus Robertson, 1902 and *Chloralictus* Robertson, 1902 (Insecta, Hymenoptera): given precedence over *Paralictus* Robertson, 1901

Keywords. Nomenclature; taxonomy; Hymenoptera; HALICTIDAE; halictine bees; *Dialictus*; *Chloralictus*; *Paralictus*.

Ruling

(1) Under the plenary powers the generic names *Dialictus* Robertson, February 1902 and *Chloralictus* Robertson, September 1902 are hereby given precedence over *Paralictus* Robertson, 1901 whenever they are considered to be synonyms of it.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Dialictus* Robertson, 1902 (gender: masculine), type species by original designation (and monotypy) *Halictus anomalus* Robertson, 1892, with the endorsement that it is to be given precedence over *Paralictus* Robertson, 1901 whenever the two names are considered to be synonyms;

(b) *Chloralictus* Robertson, 1902 (gender: masculine), type species by original designation *Halictus cressonii* Robertson, 1890, with the endorsement that it is to be given precedence over *Paralictus* Robertson, 1901 whenever the two names are considered to be synonyms;

(c) *Paralictus* Robertson, 1901 (gender: masculine), type species by original designation *Halictus cephalicus* Robertson, 1892 (a junior homonym of *Halictus cephalicus* Morawitz, 1873 and replaced by *Halictus cephalotes* Dalla Torre, 1896), with the endorsement that it is not to be given priority over *Dialictus* Robertson, 1902 or *Chloralictus* Robertson, 1902 when it is considered to be a synonym of them.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *anomalus* Robertson, 1892, as published in the binomen *Halictus anomalus* (specific name of the type species of *Dialictus* Robertson, 1902);

(b) *cressonii* Robertson, 1892, as published in the binomen *Halictus cressonii* (specific name of the type species of *Chloralictus* Robertson, 1902);

(c) *cephalotes* Dalla Torre, 1896, as published in the binomen *Halictus cephalotes* (valid replacement of the specific name of *Halictus cephalicus* Robertson, 1892, the type species of *Paralictus* Robertson, 1901).

History of Case 2995

An application for the conservation of the generic names *Dialictus* Robertson, 1902 and *Chloralictus* Robertson, 1902 by giving them precedence over *Paralictus* Robertson, 1901 was received from Prof Charles D. Michener (*Snow Entomological Museum, University of Kansas, Lawrence, Kansas, U.S.A.*) on 7 August 1995. After correspondence the case was published in BZN **52**: 316–318 (December 1995). Notice of the case was sent to appropriate journals.

It was recorded on the voting papers that a note relating to the mention of 'Michener, in preparation' in para. 4 of the application had been received (February 1997) from Prof Michener: 'The synonymy between *Dialictus*, *Chloralictus* and *Paralictus* is widely understood. It will be included in a book that will be published by Johns Hopkins University Press entitled *The Bee Fauna of the World*. I am the author. It will appear in about two years; the manuscript is finished except for updating but illustrations are still being made'.

Decision of the Commission

On 1 March 1997 the members of the Commission were invited to vote on the proposals published in BZN **52**: 317. At the close of the voting period on 1 June 1997 the votes were as follows:

Affirmative votes — 19: Bock, Brothers, Cocks, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Nielsen, Nye, Papp, Ride, Savage, Schuster, Song

Negative votes — 4: Bouchet, Minelli, Patterson and Štys.

No votes were received from Cogger and Dupuis.

Mawatari was on leave of absence.

Patterson commented: 'In my view the synonymy of *Paralictus* Robertson, 1901, *Dialictus* Robertson, 1902 and *Chloralictus* Robertson, 1902 is not proven and the application depends on that synonymy. I regard setting aside the Code in this case to be premature'. Štys commented: 'I vote against the proposals because there is no reason to believe that *Paralictus* is not, or will not be found to be, a valid taxon other than the word of the author of the application'.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

anomalus, *Halictus*, Robertson, 1892, *American Naturalist*, **26**: 272.

cephalotes, *Halictus*, Dalla Torre, 1896, *Catalogus Hymenopterorum*, vol. 10, p. 57.

Chloralictus Robertson, 1902, *Canadian Entomologist*, **34**: 245.

cressonii, *Halictus*, Robertson, 1890, *Transactions of the American Entomological Society*, **17**: 317.

Dialictus Robertson, 1902, *Canadian Entomologist*, **34**: 48.

Paralictus Robertson, 1901, *Canadian Entomologist*, **33**: 229.

OPINION 1883

Monograptus riccartonensis Lapworth, 1876 (Graptolithina): lectotype replaced by a neotype

Keywords. Nomenclature; taxonomy; graptolites; Silurian; *Monograptus riccartonensis*.

Ruling

(1) Under the plenary powers all previous fixations of type specimens for the nominal species *Monograptus riccartonensis* Lapworth, 1876 are hereby set aside and specimen BU 1585 in the Lapworth Museum, Birmingham University, U.K. is designated as the neotype.

(2) The name *riccartonensis* Lapworth, 1876, as published in the binomen *Monograptus riccartonensis* and as defined by the neotype designated under the plenary powers in (1) above, is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2984

An application to conserve the usage of the name *Monograptus riccartonensis* Lapworth, 1876 by replacing the lectotype with a neotype was received from Dr D.K. Loydell (*University of Portsmouth, Portsmouth, U.K.*) on 12 May 1995. After correspondence the case was published in BZN **52**: 319–320 (December 1995). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the publication by Koren et al., cited as 'in press' in the application (para. 2 and the reference list), had been published in *Lethaia*, **28**(2): 137–138 (1995) and reprinted in **29**(1): 59–60 (1996) with the accompanying illustration.

Decision of the Commission

On 1 March 1997 the members of the Commission were invited to vote on the proposals published in BZN **52**: 320. At the close of the voting period on 1 June 1997 the votes were as follows:

Affirmative votes — 22: Bock, Bouchet, Brothers, Cocks, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Papp, Patterson, Ride, Savage, Song, Štys

Negative votes — none.

Schuster abstained.

No votes were received from Cogger and Dupuis.

Mawatari was on leave of absence.

Original reference

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

riccartonensis, *Monograptus*, Lapworth, 1876, *Geological Magazine*, (2)**3**: 355–356.

OPINION 1884

Cyclodomorphus praealtus (Reptilia, Squamata): specific name first available from the intended original description by Shea, 1995

Keywords. Nomenclature; taxonomy; Reptilia; Squamata; SCINCIDAE; lizards; *Cyclodomorphus praealtus*; Australia.

Ruling

(1) Under the plenary powers the specific name *praealtus* Osborne, 1994, as published in the binomen *Cyclodomorphus praealtus*, and all uses of the name prior to the publication of *Cyclodomorphus praealtus* Shea, 1995, is hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The name *praealtus* Shea, 1995, as published in the binomen *Cyclodomorphus praealtus*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *praealtus* Osborne, 1994, as published in the binomen *Cyclodomorphus praealtus* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2966

An application for the specific name of *Cyclodomorphus praealtus* to be ruled as first available from the intended original description by Shea (1995) was received from Dr W.S. Osborne (*University of Canberra, Belconnen, A.C.T., Australia*) and Dr K. Green (*Victorian Department of Conservation and Natural Resources, Orbost, Victoria, Australia*) on 27 January 1995. After correspondence the case was published in BZN **52**: 257–258 (September 1995). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 December 1996 the members of the Commission were invited to vote on the proposals published in BZN **52**: 258. At the close of the voting period on 1 March 1997 the votes were as follows:

Affirmative votes — 22: Bock, Bouchet, Brothers, Cocks, Dupuis, Eschmeyer, Heppell, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Nye, Papp, Patterson, Schuster, Song, Štys

Negative votes — 1: Kerzhner.

No votes were received from Cogger and Savage.

Ride was on leave of absence.

Kerzhner commented: 'Names which are made available before their intended publication, either by the same or by a different author, are frequent. There are usually associated additional problems, which may be taxonomic (an incomplete original description), nomenclatural (differing typification) and/or ethical ('stolen' authorship). However, these problems do not normally prevent stability and universality in the use of the names, and in my view the Commission should not be asked to rule in such cases. In this case the specific name of *Cyclodomorphus praealtus* should be attributed to Shea in Osborne (1994)'.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

pracaltus, *Cyclodomorphus*, Osborne, 1994, *in* Green, K. & Osborne, W., *Wildlife of the Australian Snow-Country*, p. 104.

pracaltus, *Cyclodomorphus*, Shea, 1995, *Records of the Australian Museum*, **47**(1): 105.

OPINION 1885

Tyrannula minima Baird & Baird, 1843 (currently *Empidonax minimus*) and *Contopus pertinax* Cabanis & Heine, 1859 (Aves, Passeriformes): specific names conserved

Keywords. Nomenclature; taxonomy; Aves; TYRANNIDAE; tyrant flycatchers; least flycatcher; greater pewee; *Empidonax minimus*; *Contopus pertinax*; North America.

Ruling

(1) Under the plenary powers the following specific names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
   (a) *pusillus* Swainson, 1827, as published in the binomen *Platyrhynchus pusillus*;
   (b) *musica* Swainson, 1827, as published in the binomen *Tyrannula musica*.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:
   (a) *minima* Baird & Baird, 1843, as published in the binomen *Tyrannula minima*;
   (b) *pertinax* Cabanis & Heine, 1859, as published in the binomen *Contopus pertinax*.

(3) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:
   (a) *pusillus* Swainson, 1827, as published in the binomen *Platyrhynchus pusillus* and as suppressed in (1)(a) above;
   (b) *musica* Swainson, 1827, as published in the binomen *Tyrannula musica* and as suppressed in (1)(b) above.

History of Case 2970

An application for the conservation of the specific names of *Tyrannula minima* Baird & Baird, 1843 and *Contopus pertinax* Cabanis & Heine, 1859 was received from Dr Richard C. Banks and Dr M. Ralph Browning (*National Biological Service, National Museum of Natural History, Washington, D.C., U.S.A.*) on 20 February 1995. After correspondence the case was published in BZN **53**: 116–119 (June 1996). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 March 1997 the members of the Commission were invited to vote on the proposals published in BZN **53**: 118. At the close of the voting period on 1 June 1997 the votes were as follows:

Affirmative votes — 19: Bock, Brothers, Cocks, Eschmeyer, Heppell, Kabata, Kerzhner, Kraus, Macpherson, Mahnert, Minelli (part), Nielsen, Nye, Papp, Patterson, Ride, Savage, Schuster, Song

Negative votes — 3: Lehtinen, Martins de Souza and Štys.

Bouchet abstained.

No votes were received from Cogger and Dupuis.

Mawatari was on leave of absence.

Minelli voted in favour of the conservation of the specific name of *Tyrannula minima* Baird & Baird, 1843 but not for that of *Contopus pertinax* Cabanis & Heine, 1859. Voting against the application, Štys commented: 'The applicants have not convinced me that the senior name of each pair is really a synonym of the junior. I cannot see any reason for suppression'.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

minima, *Tyrannula*, Baird & Baird, 1843, *Proceedings of the Academy of Natural Sciences of Philadelphia*, **1**: 284.

musica, *Tyrannula*, Swainson, 1827, *Philosophical Magazine*, (N.S.)**1**(5): 368.

pertinax, *Contopus*, Cabanis & Heine, 1859, *Museum Heineanum* ..., part 2, p. 72.

pusillus, *Platyrhynchus*, Swainson, 1827, *Philosophical Magazine*, (N.S.)**1**(5): 366.

INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; manuscripts not prepared in accordance with these guidelines may be returned.

General. Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat applications on this basis. Applicants are advised to discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described . . .'. The Abstract will be prepared by the Secretariat.

References. These should be given for all authors cited. Where possible, ten or more relatively recent references should be given illustrating the usage of names which are to be conserved or given precedence over older names. The title of periodicals should be in full and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages and plates, the publisher and place of publication.

Submission of Application. Two copies should be sent to: The Executive Secretary, The International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time that it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in IBM PC compatible format, preferably in ASCII text. It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

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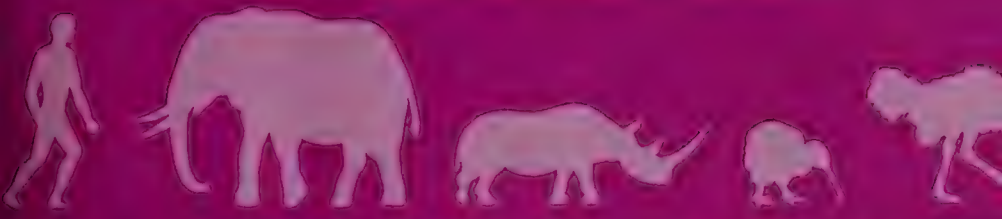

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 54, part 4 (pp. 209–264) 18 December 1997

Notices

(a) *Invitation to comment*. The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles*. At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications*. The following new applications have been received since going to press for volume 54, part 3 (published on 30 September 1997). Under Article 80 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

(1) *Sparus chrysopterus* Bloch & Schneider, 1801 (currently *Sparisoma chrysopterum*; Osteichthyes, Perciformes): proposed conservation of the specific name, and designation as the type species of *Sparisoma* Swainson, 1831. (Case 3051). R.L. Moura & J.E. Randall.

(2) AGATHIDINAE Blanchard, 1845 (Insecta, Hymenoptera): proposed conservation of usage. (Case 3053). R.A. Wharton & C. van Achterberg.

(3) AUGOCHLORINI Moure, 1943 (Insecta, Hymenoptera): proposed precedence over OXYSTOGLOSSINI Schrottky, 1909. (Case 3054). M.S. Engel.

(4) *Osilinus* Philippi, 1847 (Mollusca, Gastropoda): proposed designation of *Trochus turbinatus* Born, 1778 as the type species. (Case 3055). S. Gofas & D.G. Herbert.

(5) *Andrena spectabilis* Smith, 1853 and *A. nigrospina* Thomson, 1872 (Insecta, Hymenoptera): proposed conservation of the specific names. (Case 3057). D.B. Baker.

(6) *Arctocephalus* Geoffroy St.-Hilaire & F. Cuvier, 1826 (Mammalia, Pinnipedia): proposed designation of *Phoca pusilla* Schreber, 1775 as the type species. (Case 3058). A.L. Gardner & C.B. Robbins.

(7) *Bernhardus armatus* Dana, 1851 (currently *Pagurus armatus*; Crustacea, Anomura): proposed replacement of neotype by rediscovered syntype. (Case 3059). C.B. Boyko & A.W. Harvey.

(8) *Cichlops cyclophthalmus* Müller & Troschel, 1849 (currently *Labracinus cyclophthalmus*; Osteichthyes, Perciformes): proposed precedence of the specific name over that of *Julis horsfieldii* Valenciennes, 1839. (Case 3060). A.C. Gill & J.E. Randall.

(9) *Bagrus nemurus* Cuvier & Valenciennes, 1839 and *B. sieboldii* Bleeker, 1846 (currently *Hemibagrus nemurus* and *H. sieboldii*; Osteichthyes, Siluriformes): proposed designation of neotypes. (Case 3061). H.H. Ng, Y.Y. Goh, J.J. Dodson & P.K.L. Ng.

(10) *Bagrus flavus* Bleeker, 1846 (Osteichthyes, Siluriformes): proposed designation of the lectotype of *B. planiceps* Valenciennes, 1840 (currently *Hemibagrus planiceps*) as the neotype of *B. flavus*. (Case 3062). H.H. Ng, Y.Y. Goh, J.J. Dodson & P.K.L. Ng.

(11) *Blennocampa* Hartig, 1837, *Cryptocampus* Hartig, 1837, *Poecilostoma* Dahlbom, 1835 and *Taxonus* Hartig, 1837 (Insecta, Hymenoptera): proposed acceptance of type species designations by Rohwer (1911) and suppression of those by Gimmerthal (1847). (Case 3063). S.M. Blank & A. Taeger.

(12) *Strongylogaster* Dahlbom, 1835 (Insecta, Hymenoptera): proposed designation of *Tenthredo lineata* Christ, 1791 as the type species. (Case 3064). S.M. Blank, A. Taeger & T. Naito.

(13) *Hylotoma* Latreille, 1803 (Insecta, Hymenoptera): proposed designation of *Tenthredo ochropus* Gmelin, 1790 as the type species. (Case 3065). A. Taeger & S.M. Blank.

(14) *Macrophya* Dahlbom, 1835 (Insecta, Hymenoptera): proposed designation of *Tenthredo montana* Scopoli, 1763 as the type species. (Case 3066). A. Taeger & S.M. Blank.

(15) *Hemichroa* Stephens, 1835 (Insecta, Hymenoptera): proposed designation of *Tenthredo australis* Serville, 1823 as the type species. (Case 3067). A. Taeger, S.M. Blank & A. Zinovjev.

(16) *Musca rosae* Fabricius, 1794 (currently *Chamaepsila* or *Psila rosae*; Insecta, Diptera): proposed conservation of the specific name. (Case 3068). P. Chandler.

(17) *Solenopsis invicta* Buren, 1972 (Insecta, Hymenoptera): proposed conservation of the specific name. (Case 3069). S.O. Shattuck, S.D. Porter & D.P. Wojcik.

(d) *Rulings of the Commission*. Each Opinion published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

The International Commission on Zoological Nomenclature — electronic information

Regularly updated information about the Commission is available on the World Wide Web at http://www.iczn.org.

The International Code of Zoological Nomenclature

The new (4th) edition of the International Code of Zoological Nomenclature will be published in 1998. A notice about some new provisions in it is given on pages 216–218. Meanwhile, copies of the 3rd edition (published 1985) are still available. Copies may be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk) *or* A.A.Z.N., Attn. Dr D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560, U.S.A. (e-mail: smithd@nmnh.si.edu).

The cost is £19 or $35 (including surface postage); members of the American and European Associations for Zoological Nomenclature are offered the reduced price of £15 or $29. Payment (cheques made out to 'ITZN' or 'AAZN') should accompany orders or should follow if the order is made by electronic means.

Towards Stability in the Names of Animals

The International Commission on Zoological Nomenclature was founded on 18 September 1895. In recognition of its Centenary a history of the development of nomenclature since the 18th century and of the Commission has been published entitled '*Towards Stability in the Names of Animals – a History of the International Commission on Zoological Nomenclature 1895–1995*' (ISBN 0 85301 005 6). It is 104 pages (250 x 174 mm) with 18 full-page illustrations, 14 being of eminent zoologists who played a crucial part in the evolution of the system of animal nomenclature as universally accepted today. The book contains a list of all the Commissioners from 1895 to 1995. The main text was written by R.V. Melville (former Secretary of the Commission) and has been completed and updated following his death.

Copies may be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk) *or* A.A.Z.N., Attn. Dr D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560, U.S.A. (e-mail: smithd@nmnh.si.edu).

The cost is £30 or $50 (including surface postage); members of the American and European Associations for Zoological Nomenclature are offered the reduced price of £20 or $35. Payment (cheques made out to 'ITZN' or 'AAZN') should accompany orders or should follow if the order is made by electronic means.

CURTIS W. SABROSKY (1910–1997)

The distinguished American entomologist Curtis Sabrosky died suddenly on 5th October 1997 after a long career devoted in almost equal measure to his research interests as a dipterist and to the cause of zoological nomenclature. He was 87. His vitality was legendary, and to the end he left many a younger man exhausted by his boundless energy and his undimmed enthusiasm for his many interests. He travelled very widely, and his death occurred in Helsinki following a visit to Russia.

Of his service to the International Commission on Zoological Nomenclature it is fair to say that nobody in recent times gave more wholeheartedly. He became a Commissioner in 1963, serving 22 years in this capacity and as President from 1977 to 1983. He was a member of the Editorial Committee responsible for the first modern (1961) edition of the Code, and Norman Stoll's Introduction pays tribute to his leadership, energy and skill. He was similarly prominent in the preparation of the 1985 edition, and made detailed and constructive contributions to the Commission's discussions at its 1996 meeting in Budapest on the new edition shortly to be published.

It cannot be said that Sabrosky's early relations with the Commission were always harmonious and there was some rough water to cross. In particular, his relationship with Francis Hemming was frosty almost from the time when Hemming became Secretary of the Commission in 1936. As Richard Melville, who took over from Hemming in 1958, wrote many years later, one of the ill effects of this was to make it effectively impossible for Curtis Sabrosky to join the Commission until Hemming had retired. Melville himself was at first wary of Curtis; opposite views were often forcefully exchanged by the two men, but they always greatly respected each other's experience and clarity of thought. They became close personal friends and a team that was of lasting benefit to the Commission and to nomenclature.

Curtis Williams Sabrosky was born in Sturgis, Michigan, on 3rd April 1910 and raised in the American mid-west. After graduating at Kalamazoo College and taking an M.S. degree at Kansas State University, he taught entomology from 1936 to 1944 at Michigan State University. It was at this time that his close interest in the Diptera began and, after a short wartime spell attached to the U.S. Public Health Service, he took a position as a dipterist at the Systematic Entomology Laboratory of the U.S. Department of Agriculture, housed in the National Museum in Washington. On retirement from U.S.D.A. in 1980 he received its Distinguished Service Award.

Curtis's taxonomic output on Diptera was prodigious. His main research interest focused on the Chloropidae, a family of small acalyptrate flies, but he published on many other families and his bibliography runs to some 400 entries. It is not only the Commission that will recall Sabrosky's massive contribution: he served as President of several zoological and entomological societies and was for 20 years on the Permanent Committee of the International Congress of Entomology.

Retirement — so-called – enabled him to complete some long-envisaged major undertakings, such as a fine book on the cuterebrid myiasis-producing flies and a stupendous work on the family-group names in Diptera. On this last project he had worked for over half a century and the text was complete at the time of his death; sadly, he did not live to see the volume in print.

Though an entomological workaholic, Curtis was a convivial man who lived life to the full. He was an expert ballroom dancer, a talent maintained to the very end of his life, and for many years he and his wife Laurel (she died in 1988) had a weekly fixture with friends at their local 10-pin bowling alley. He had an extraordinary memory which served him (and his friends) well for he always had a good new joke to tell, and when it came to zoological nomenclature he seemed able to recall every precedent or parallel — whether from entomology, general zoology, palaeontology, even botany. He was a stimulating man, sometimes stubborn, who won the deep and lasting affection of his many friends.

This note has been compiled with the help of Dr. R.W. Crosskey.

International Trust for Zoological Nomenclature

Financial Report for 1996

The Trust was fortunate in reducing its deficit for 1996 to the low figure of £984, compared with the deficit of £4441 in the previous year. This was only possible because of the continuing generosity of our donors, who contributed a total of £26,987 to the Trust, as listed at the end of this report. Despite the invaluable continuation of substantial sums from the Royal Society of London (£9000), the American Association for Zoological Nomenclature (£6002), the Toyota Foundation (£1767) and the others listed below, the Trust's deficit would have been much larger but for the generosity of the British Ecological Society (£4295) and Glaxo Wellcome (£3000).

Nearly half the Trust's income came from sales of publications, mainly from the *Bulletin of Zoological Nomenclature* which yielded an income of £27,342. Sales of the *Official Lists and Indexes*, the *International Code of Zoological Nomenclature* and the Centenary History of the Commission brought the total income from publications to £32,550. Income from grants and donations, as already mentioned, and interest and investment income of £10,339 brought the total income for the year to £69,876.

The main expenditure in 1996 was £54,816 for the salaries and National Insurance of the Secretariat of the International Commission on Zoological Nomenclature. Printing of the *Bulletin of Zoological Nomenclature* and distribution of all publications amounted to £10,011, and £1563 was spent on preparation of the forthcoming 4th edition of the *International Code of Zoological Nomenclature*. Other costs for office expenses (£4085), which included attendance at the ICSEB meeting in Budapest in August, and depreciation of office equipment (£385) brought the total expenditure to £70,860.

The Commission Secretariat was again housed in The Natural History Museum, London, whom we thank for their continuing support. The Trust wishes to express its thanks to all the donors listed below who contributed to its work during the year. Continuing support of this kind is vital if the Commission is to carry out its work for the international zoological and palaeontological community.

M.K. HOWARTH
Secretary and Managing Director
28 April 1997

List of donations and grants received during the year 1996

American Association for Zoological Nomenclature	£6,002
W.F.H. Ansell	£5
Australian Fauna Collections and the Australian Biological Resources Study	£1,406
British Ecological Society	£4,295
D.A. Brown	£10
Freshwater Biological Association, U.K.	£5
Glaxo Wellcome	£3,000
Palaeontological Association, U.K.	£500

Plankton Society of Japan	£44
Royal Danish Academy of Sciences and Letters	£99
Royal Entomological Society of London	£300
Royal Society of London	£9,000
Royal Society of Victoria	£180
St John's College, Cambridge	£250
Academia Sinica, Taiwan	£124
Toyota Foundation, Japan	£1,767
Total	£26,987

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 1996

Income		
SALE OF PUBLICATIONS		
Bulletin of Zoological Nomenclature	£27,342	
International Code of Zoological Nomenclature	1,459	
Official Lists and Indexes	299	
Centenary History	3,450	
	32,550	
GRANTS AND DONATIONS		26,987
BANK AND INVESTMENT INTEREST		10,339
		69,876
Expenditure		
SALARIES, NATIONAL INSURANCE AND FEES	54,816	
OFFICE EXPENSES	4,085	
PRINTING AND DISTRIBUTION OF PUBLICATIONS	10,011	
PREPARATION OF 4TH EDITION OF THE CODE	1,563	
DEPRECIATION OF OFFICE EQUIPMENT	385	
		70,860
Deficit for the year		£ 984

Fourth Edition of the *International Code of Zoological Nomenclature*: notice of new provisions

The summary that follows this statement outlines some significant changes from the current Third (1985) Edition of the Code that are undergoing final drafting by the Editorial Committee of the International Commission on Zoological Nomenclature. These changes were agreed by the Commission at its 1996 meeting in Budapest, as reported in the *Bulletin of Zoological Nomenclature*, **53**: 235–237, 240–243. Subsequently all the changes summarized here were confirmed, subject to detailed drafting, by a two-thirds majority of the Commission in an indicative postal vote. The finished text of the Code will be submitted to the Commission for a final vote of approval, as required by the Commission's Constitution.

The Fourth Edition of the *International Code of Zoological Nomenclature*, including these changes amongst others, will come into effect on 1 January 1999. The Third Edition of the Code will remain in force until then.

The purpose of this summary is to enable zoologists and others to become aware, in advance, of the major impending changes which might affect nomenclatural decisions on work currently in preparation which will not be published before 1 January 1999. These changes include requirements that authors must follow if new names published after 1998 are to be made available. The additional requirements for new names reflect what is widely accepted by modern zoologists as being good taxonomic practice.

When published, the Fourth Edition of the Code will have taken into account more than 500 written comments by zoologists (and groups of zoologists) made in response to a Discussion Draft that was distributed widely in 1995.

The new edition will reflect these comments. In part, these revealed an awareness that the rules must take into account changes in publishing methods (and, in particular, electronic information systems). More generally, the provisions will reflect an increased desire in the zoological community that the rules should provide measures that will, within reason, favour stability in the usage of names over strict chronological priority, providing always that taxonomic freedom of expression is maintained. There has also been strong public support for proposals to enable zoologists to find automatic solutions for many cases in which, under earlier editions of the Code, the only recourse was to seek a ruling from the Commission. Under the new Edition, recourse to the Commission will remain an option in cases of doubt or dispute. It will remain the prescribed course in cases in which individual action by an author would be more likely to hinder than promote a universally accepted outcome.

The Commission has, as a result of the responses, also extensively modified many of the proposals in the Discussion Draft. Therefore, the wording of no part of that document (even when the general principle concerned has been approved by the Commission) should be anticipated as that to be found in the Fourth Edition of the Code. In the face of strong opposition, some of the measures proposed in the Discussion Draft have been deleted. These include proposals to dispense with gender agreement between generic names and their combined epithets, to extend the principle of homonymy to names across all biological kingdoms, and to require the registration of all new names.

The changes listed in the summary below are published for advice only and must not be treated as though they were provisions of a Code. However, we publish them now to give a clear indication of impending changes that may affect such things as the availability of new names. If further information or clarification is required, advice may be sought from the Secretariat of the Commission (*ICZN, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.*; e-mail *iczn@nhm.ac.uk*).

A. Minelli
President
W.D.L. Ride
Chairman, Editorial Committee

Proposals of new names

1. A new name published after 1998 will not be made available unless it is explicitly indicated as being new (preferably by the use of a term such as 'sp. nov.', 'gen. nov.', 'fam. nov.', 'nom. nov.', or a directly equivalent term in the language in which the paper is written).

2. The proposal after 1998 of a new species-group nominal taxon will have to include the fixation for it of a name-bearing type (a holotype, a syntype series, or a hapantotype) in a manner that enables the subsequent recognition of that type (for example, by collection number).

3. When the name-bearing type of a species-group taxon proposed after 1998 consists of a preserved specimen or specimens, the proposal will be required to include a statement naming the public institution (not private collection) in which the name-bearing type will be deposited.

4. The proposal after 1998 of a new genus-group nominal taxon for an ichnotaxon (including trace fossils) will have to include the designation of a type species.

5. An author establishing a new family-group name after 1998 may adopt a stem of the name of the type genus which is not that derived from the genitive of the generic name according to strict grammar, and such a spelling is to be maintained by subsequent authors. For example, an author intending to establish a new family-group name which would be a homonym of an existing name, because the stems of the names of the respective type genera are identical, will be able (and is advised) to avoid homonymy by incorporating the entire name of the type genus into the spelling of the new family-group name.

Lectotype designations

6. Lectotype designations made after 1998 will be required to use the term 'lectotype' or a direct translation of it, and be accompanied by a statement to the effect that the designation is made with the purpose of clarifying the application of the name to a taxon.

Matters affecting neotypes

7. If a previously lost holotype, syntype or lectotype of a species subsequently typified by a neotype is rediscovered, the original type specimen(s) will automatically displace the neotype and become the name-bearing type. If this causes confusion or

instability an author should apply to the Commission for reinstatement of the neotype.

8. If the existing name-bearing type of a species-group taxon is indeterminate, so that the correct application of the name to a particular taxon is doubtful ('sp. indet.' or 'nom. dubium'), an author will be able to request the Commission to set it aside and designate a neotype.

Changes affecting publication

9. A work not printed on paper (e.g., on a laser disk) issued after 1998 in numerous identical, durable and unalterable copies may be regarded as published if supplemented by identical copies, printed on paper, and deposited in at least 10 named and internationally dispersed libraries.

10. For purposes of zoological nomenclature, the following kinds of material will be regarded as unpublished:

(a) electronically distributed text or illustrations;

(b) down-loaded copies or printouts of such material;

(c) abstracts of papers, posters, lectures, etc., issued to participants at congresses, symposia and other meetings but not otherwise published;

(d) offprints (separates) distributed after 1998 in advance of the date of publication specified in the work of which the offprint forms part.

Measures empowering authors to act in the interests of preserving established usage

11. An author will be required (without a ruling by the Commission) not to displace a name which has been used as valid by at least 10 authors in 25 publications during the past 50 years by an earlier synonym or homonym which has not been used as valid since 1899.

12. An author will be required to maintain the particular spelling currently in use for a name, even if it is found not to be the correct original spelling. For example, the spellings of family-group names currently in use will be maintained even if formed from incorrect grammatical stems.

13. If an author discovers that the type species fixation of a genus-group taxon was based on a misidentification of the type species, the author will be able, in the interests of stability and without making application to the Commission, to fix as type species either the taxonomic species actually involved or the misidentified nominal species fixed previously.

14. If it is found after 1998 that a name currently in general use for a family-group taxon is later than the name currently in use for one of its subordinate family-group taxa, the name used for the higher rank taxon is not to be displaced by the name of the subordinate taxon.

Case 3035

Trachelocerca Ehrenberg (Ciliophora): proposed conservation of authorship as Ehrenberg (1840), with fixation of *Vibrio sagitta* Müller, 1786 as the type species

John O. Corliss
P.O. Box 2729, Bala Cynwyd, Pennsylvania 19004, U.S.A.

Wilhelm Foissner
Universität Salzburg, Institut für Zoologie, Hellbrunnerstrasse 34, A-5020 Salzburg, Austria

Abstract. The purpose of this application is the conservation of the generic name *Trachelocerca* Ehrenberg, 1840, in use for marine ciliates which have non-dividing macronuclei and belong to the group called Karyorelictea by Corliss (1994). *Trachelocerca* in this sense has *Vibrio sagitta* Müller, 1786 as the type species by monotypy. Recent workers have overlooked that six years earlier Ehrenberg [1834] had used the name *Trachelocerca* in a sense which would make it a junior synonym of *Lacrymaria* Bory de St. Vincent, [1824], a name in use for freshwater ciliates belonging to a different group. It is proposed that the earlier [1834] usage of *Trachelocerca* should be suppressed.

Keywords. Nomenclature; taxonomy; Protozoa; Ciliophora; Karyorelictea; *Trachelocerca*; *Trachelocerca sagitta*; *Lacrymaria*; marine ciliates.

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1. Ehrenberg ([1834], p. 316) erected the freshwater protozoan genus *Trachelocerca* with three nominal species: *Vibrio olor* Müller, 1786 (p. 75) and the new species *T. biceps* and *T. viridis*. No type species was fixed. Bory de St. Vincent ([1824], p. 479) had earlier placed *V. olor* in his own new genus *Lacrymaria*, and in 1875 it was designated as the type species of that genus by Fromentel (p. 174). *T. biceps* is, according to our modern understanding of ciliate morphology, not a distinct species but a monster form of *Lacrymaria* sp., as indeed supposed possible by Ehrenberg ([1834]). *T. viridis* is closely related to *L. olor* but differs in having symbiotic algae; Kent (1881, p. 515) considered it to be a variety of *L. olor* and this has never been disputed, although there is no recent information about this species.

2. Ehrenberg (1840, p. 202) placed *Vibrio sagitta* Müller, 1786 (p. 59) in the nominal genus *Trachelocerca*. In doing this he mentioned neither any other species nor his previous use of the name *Trachelocerca*; he repeated Müller's diagnosis of *V. sagitta* and stated that it was marine (found in the Baltic and North Seas). Had *Trachelocerca* not been published in 1834 it would be available from Ehrenberg (1840), with *V. sagitta* as the type species by monotypy. The genus was treated in this way by Stein (1859, pp. 72, 80), but other workers used *Trachelocerca* in different and often vague senses (see Foissner & Dragesco, 1996, pp. 45–46).

3. Kahl (1930) and Dragesco (1960) both cited Ehrenberg (1840) as the author of *Trachelocerca*, unaware that Ehrenberg had originally established the name six years earlier. Kahl did not mention a type species, but Dragesco (p. 110) designated *Trachelocerca entzi* Kahl, 1927 as the type; this is invalid since the species was of course never included in the genus by Ehrenberg. Kahl's species does not belong to the same group (the Karyorelictea; Corliss, 1974, 1994) as *T. sagitta* (see Foissner, 1997).

4. Delphy (1939) split *Trachelocerca* into four genera, deliberately but unjustifiably citing Cohn (1866) as the author of the genus, and invalidly designated *T. phoenicopterus* Cohn, 1866 as the type species. Cohn himself (p. 264) had cited Ehrenberg (1840) as the author of *Trachelocerca*. Dragesco (1960, p. 120) designated *T. phoenicopterus* as the type species of his new genus *Tracheloraphis*.

5. Foissner & Dragesco (1996) gave Ehrenberg (1840) as the author of *Trachelocerca* and *Vibrio sagitta* Müller, 1786 as the type species by monotypy (cf. para. 2 above). Like the other authors mentioned above they overlooked the fact that *Trachelocerca* had been published by Ehrenberg in 1834, with different included species. Foissner & Dragesco thoroughly redescribed and illustrated *T. sagitta* from the French Atlantic coast, together with other species.

6. *Trachelocerca* is well established in modern ciliate literature as comprising exclusively marine species with uniquely non-dividing diploid macronuclei, like *T. sagitta* (see for example Dragesco, 1960; Corliss, 1979; Foissner & Dragesco, 1996).

7. If *Trachelocerca* were to be taken from Ehrenberg ([1834]) it would fall as a junior subjective synonym of *Lacrymaria* Bory de St. Vincent, 1824, a genus also well established in current literature but for a very different group of species (see Corliss, 1979). *Trachelocerca* Ehrenberg, 1840, always used in recent decades for species related to *Vibrio sagitta* Müller, 1786, could be replaced by the junior subjective synonyms *Gruvelina* or *Nephrocerca*, both of Delphy (1939), but this would involve changes in many well established ciliate names.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the generic name *Trachelocerca* Ehrenberg, [1834] and all uses of that name prior to its publication by Ehrenberg (1840) for the purposes of both the Principle of Priority and the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the name *Trachelocerca* Ehrenberg, 1840 (gender: feminine), type species by monotypy *Vibrio sagitta* Müller, 1786;

(3) to place on the Official List of Specific Names in Zoology the name *sagitta* Müller, 1786, as published in the binomen *Vibrio sagitta* (specific name of the type species of *Trachelocerca* Ehrenberg, 1840);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Trachelocerca* Ehrenberg, [1834], as suppressed in (1) above.

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Case 2948

Turrilites gravesianus d'Orbigny, 1842 (currently *Hypoturrilites gravesianus*; Mollusca, Ammonoidea): proposed conservation of the specific name and designation of a replacement lectotype; *Turrilites tuberculatus* Bosc, 1801 (currently *Hypoturrilites tuberculatus*): proposed designation of a neotype

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Abstract. The purpose of this application is to stabilise the current usage of the specific name of the widespread Upper Cretaceous ammonite species *Hypoturrilites gravesianus* (d'Orbigny, 1842). The lectotype designated by Kennedy (1971) is a composite specimen and a new lectotype is proposed. The holotype of the unused nominal species *Turrilites giganteus* de Haan, 1825 is conspecific with *H. gravesianus* and suppression of the name *T. giganteus* is proposed. Since Mantell (1822) the name *Turrilites* (now *Hypoturrilites*) *tuberculatus* Bosc, 1801 has been used for a species closely related to *H. gravesianus*, but the lost holotype of *T. tuberculatus* apparently belonged to another genus. A neotype which accords with the established usage of the name *Hypoturrilites tuberculatus* is designated.

Keywords. Nomenclature; taxonomy; Cephalopoda; Ammonoidea; Upper Cretaceous; ammonites; *Hypoturrilites*; *Hypoturrilites gravesianus*; *Hypoturrilites tuberculatus*.

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1. Dubourdieu (1953, p. 44) established the genus *Hypoturrilites* for a group of Cenomanian (Upper Cretaceous) ammonites species and designated *Turrilites gravesianus* d'Orbigny, 1842 (p. 596) as type species. This species, and its close relative *T. tuberculatus* Bosc, 1801 (p. 18), are of almost worldwide distribution and have been frequently quoted in the literature of the last 150 years (see Wright & Kennedy, 1996, pp. 363–379).

2. Kennedy (1971, p. 21) designated as the lectotype of *T. gravesianus* 'd'Orbigny's figured specimen from Oise, France (Graves Collection)'. D'Orbigny (1842, p. 597) in the explanation of his pl. 144, fig. 3, said that this 'specimen' came from both the collection of Graves and of his own ('De la collection de M. Graves à Beauvais, et de la mienne'). This implies that the figure was composite, being restored from two or more fragments, a common practice in d'Orbigny's and contemporary works. The Graves collection has not been traced and neither of the two specimens listed in d'Orbigny's catalogue matches his figure. The surviving specimens of those listed in d'Orbigny's catalogue were illustrated by Wright & Kennedy (1996, text-figs. 140J,

K). D'Orbigny's figure of *Turrilites tuberculatus* on the same plate as that of *T. gravesianus* is demonstrably a composite based on two species, the specimens of which were discussed and refigured by Wright & Kennedy (1996, p. 369, text-figs. 144A-E). Kennedy & Cooper (1977) demonstrated that d'Orbigny's figures of *Ammonites prosperianus* (1841, p. 335, pl. 100, figs. 3, 4) were based on fragments of at least two different genera belonging to different suborders.

3. In view of the absence of specimens and the doubts about the nature of the original specimen or specimens of d'Orbigny's figure it is desirable to set aside Kennedy's designation of it (or them) as lectotype and to designate in its place one of the surviving paralectotypes. The two specimens in d'Orbigny's collection (no. 6140 in the d'Orbigny Collection, and from La Malle, Var, France, now housed in the Muséum National d'Histoire Naturelle, Paris) are very badly preserved (see Wright & Kennedy, 1996, text-figs. 140J, K), but d'Orbigny also cited in his synonymy of *Turrilites gravesianus* the figure by Mantell (1822, pl. 24, fig. 6) so making that specimen also a syntype. It is preserved in the Natural History Museum, London, as specimen no. BMNH C5762b, and was refigured by Wright & Kennedy, 1996, pl. 113, fig. 10. We propose that the Commission should designate this specimen as lectotype. As noted by Phillips (1977, p. 93) it was glued to a larger fragment, BMNH C5762a (refigured by Wright & Kennedy, 1996, pl. 113, fig. 13), and the resulting composite was figured by Mantell (1822, pl. 24, fig. 7) and refigured as *T. gravesianus* by Sharpe (1857, p. 25, fig. 1). It was also figured by Kennedy (1971, pl. 6, fig. 11) who pointed out that it was a chimaera, the upper whorls belonging to *Hypoturrilites gravesianus* and the lower whorls to *H. tuberculatus*.

4. The stability of the specific name of *Turrilites gravesianus* in its current usage is also threatened by the fact that de Haan (1825, p. 78) established a species *Turrilites giganteus* based on J. Sowerby's figure (1814, pl. 74) of *Turrilites tuberculatus* Bosc, 1801. The original of this figure, specimen no. BMNH C5761 in the Natural History Museum, London, from the Lower Chalk of Middleham, Sussex, U.K., is the holotype by monotypy of *T. giganteus* de Haan, 1825 but is identical with *T. gravesianus* d'Orbigny, 1842; the specimen was refigured by Wright & Kennedy (1996, pl. 109, fig. 5). To the best of our knowledge the name *T. giganteus* de Haan has never been used in the literature and is not even listed in Diener's *Fossilium Catalogus* (1925). In contrast, *T. gravesianus* is widely used; Wright & Kennedy (1996, p. 365) listed 38 citations between 1842 and 1991. To revive *Turrilites giganteus* for *T. gravesianus* would cause great confusion and we recommend that the Commission should suppress the former name.

5. The name *Turrilites tuberculatus* was introduced by Bosc (1801) thus: '2. T. tuberculeuse; t. tuberculata. D. Montfort, Journ. de phys, an 7, pl. 1, fig. 2. Tours de spire chargés de quatre ranges de tubercules disposes en quinconce; base sillonée. Cette espèce se trouve, ainsi que le précédente, dans la Montagne de Sainte Catherine, près Rouen'. The specimen figured, but not named, by de Montfort was reproduced by Bosc, and is therefore the holotype. The figure, reproduced by Wright & Kennedy (1996, text-fig. 144F), appears to have been reconstructed, but the specimen is now lost. D'Orbigny (1842, p. 595) stated that it gave a false impression of the position of the tubercles and of the spiral angle, but other figures on de Montfort's plate are clearly accurate. The figure shows equal numbers of tubercles in all four rows, a feature of *Mariella* Nowak, 1915, and not a lesser number in the upper row,

characteristic of *Hypoturrilites* to which *T. tuberculatus* Bosc is now universally referred. D'Orbigny and subsequent authors have referred Sowerby's (1814, pl. 74) figure of BMNH C5761 to *T. tuberculatus*, but this is a specimen of *Hypoturrilites gravesianus* and also the holotype of *T. giganteus* de Haan. Thus the lost holotype of *T. tuberculatus* apparently belonged to a genus different from that to which the nominal species is now generally referred. Kennedy (1971, p. 21) outlined the diagnostic differences between *H. gravesianus* and *H. tuberculatus*. The earliest recognisable figure of a surviving specimen that was called *T. tuberculatus* and which accords with general current usage of the name is the three lower whorls of the composite (see para. 3 above) in Mantell (1822, pl. 24, fig. 7), i.e. specimen no. BMNH C5762a. Wright & Kennedy (1996, p. 367) listed 29 citations in conformity with current usage between 1822 and 1987. To avoid confusion and to maintain stability of nomenclature we hereby designate this specimen, reillustrated by Wright & Kennedy (1996, pl. 113, fig. 13), as the neotype of *Turrilites tuberculatus* Bosc, 1801.

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:
  (a) to suppress the name *giganteus* de Haan, 1825, as published in the binomen *Turrilites giganteus*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
  (b) to set aside all previous type fixations for the nominal species *Turrilites gravesianus* d'Orbigny, 1842 and to designate as lectotype specimen no. BMNH C5762b in the collections of the Natural History Museum, London;

(2) to place on the Official List of Generic Names in Zoology the name *Hypoturrilites* Dubourdieu, 1953 (gender: masculine), type species by original designation *Turrilites gravesianus* d'Orbigny, 1842;

(3) to place on the Official List of Specific Names in Zoology the following names:
  (a) *gravesianus* d'Orbigny, 1842, as published in the binomen *Turrilites gravesianus* and as defined by the lectotype designated in (1)(b) above (specific name of the type species of *Hypoturrilites* Dubourdieu, 1953);
  (b) *tuberculatus* Bosc, 1801, as published in the binomen *Turrilites tuberculatus* and as defined by the neotype designated in para. 5 above;

(4) to place on the Official Index of Rejected and Invalid Names in Zoology the name *giganteus* de Haan, 1825, as published in the binomen *Turrilites giganteus* and as suppressed in (1)(a) above.

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Case 2924

MELOIDAE Gyllenhal, 1810 and NEMOGNATHINAE Castelnau, 1840 (Insecta, Coleoptera): proposed precedence over HORIIDAE Latreille, 1802

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Abstract. The purpose of this application is to conserve the blister beetle names MELOIDAE Gyllenhal, 1810 (type genus *Meloe* Linnaeus, 1758) and NEMOGNATHINAE Castelnau, 1840 (type genus *Nemognatha* Illiger, 1807) by giving them precedence over HORIIDAE Latreille, 1802 (type genus *Horia* Fabricius, 1787). The family-group name ZONITINAE Mulsant, 1857 (type genus *Zonitis* Fabricius, 1775) is corrected to ZONITIDINAE.

Keywords. Nomenclature; taxonomy; Coleoptera; blister beetles; MELOIDAE; NEMOGNATHINAE; HORIIDAE; ZONITIDINAE.

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1. In 1802 Latreille (p. 182) introduced the name HORIALES (corrected to HORIIDAE), type genus *Horia* Fabricius, 1787, p. 164 (type species *Horia fabriciana* Betrem, 1929, p. xxvii, by subsequent designation by Betrem, 1929, p. xxvii). This was the first work to use named genera as the foundation of family-group names of Coleoptera (see Watt, 1975, pp. 32–33). In 1810 Gyllenhal (p. 481) published the name MELOOIDES based on the type genus *Meloe* Linnaeus, 1758, p. 419 (type species *Meloe proscarabaeus* Linnaeus, 1758, p. 430, by subsequent designation by Latreille, 1810, p. 419) for the same group of beetles; under Article 35d(i) of the Code the incorrectly formed name MELOOIDES must be corrected to MELOIDAE. Virtually all workers since LeConte (1853, p. 328) and Lacordaire (1859, p. 663) have placed *Horia* and *Meloe* in the same family. Consequently, as indicated by Watt (1975, pp. 32–33) and Bologna (1991, p. 68, note 1), MELOIDAE Gyllenhal is formally a junior subjective synonym of HORIIDAE Latreille.

2. The family name MELOIDAE Gyllenhal, 1810 was widely used in the 19th century (e.g. LeConte, 1862; Champion, 1892; Reitter, 1895) and now has gained general acceptance, appearing in all major publications (e.g. Borchmann, 1917; Van Dyke, 1928; Denier, 1935; Cros, 1940; Kaszab, 1956, 1959, 1969; Selander, 1964, 1991; Pinto & Selander, 1970; Bologna, 1991). A family-group name based on *Horia* has not been used, except in a very restricted sense (see para. 5 below), since the early decades of the 19th century (e.g. Latreille, 1802; Castelnau, 1840).

3. Several other family-group names used as synonyms of HORIIDAE were introduced in the early literature. They include CANTHARIDAE Latreille, 1802 (p. 384) based on *Cantharis* sensu Geoffroy (1762, p. 339) (= *Lytta* Fabricius, 1775; see Watt, 1975, p. 32), a junior homonym or deliberate misidentification of *Cantharis* Linnaeus, 1758 (p. 400), LYTTIDAE Wellman, 1910 (p. 220), and several names not based on included nominal genera (see Borchmann, 1917, pp. 3–4). None of them has gained acceptance by entomologists or others. CANTHARIDAE Imhoff, 1856 is in use (see, for example, Crowson, 1955, p. 69; Watt, 1975, pp. 32–33; Lawrence & Newton, 1995, p. 784) for an unrelated group of beetles which includes *Cantharis* Linnaeus, 1758.

4. The family MELOIDAE is well known for its unique hypermetabolous development. The adults of several species have a reputation as crop pests. The larvae of certain genera are parasitoids of grasshopper eggs and are of some importance to natural and biological control. In addition the family has gained notoriety as the source of cantharidin, a natural vesicant which is responsible for the group's common name, the blister beetles. Consequently, to use the senior name HORIIDAE instead of MELOIDAE would affect not only an extensive taxonomic literature but more than 150 years of literature in general, agricultural, medical and veterinary entomology.

5. The subfamily HORIINAE Latreille, 1802 has primarily been used in a restricted sense to include the genera *Horia* Fabricius, *Synhoria* Kolbe, 1897 and *Cissites* Latreille, 1804 (see MacSwain, 1956; Kaszab, 1959, 1969). A subfamily including a larger assemblage of genera such as *Zonitis* Fabricius, 1775, *Nemognatha* Illiger, 1807, *Apalus* Fabricius, 1775, *Sitaris* Latreille, 1802, has been variously named ZONITINAE Mulsant, 1857, p. 164, type genus *Zonitis* Fabricius, 1775, p. 126 (type species *Zonitis flava* Fabricius, 1775, p. 127, by subsequent designation by Selander, 1987, p. 341) or NEMOGNATHINAE Castelnau, 1840, p. 280, type genus *Nemognatha* Illiger, 1807, p. 333 (type species by monotypy *Zonitis vittata* Fabricius, 1801, p. 24), whether or not it is defined to include *Horia* Fabricius. However, the senior name for a subfamily defined to include *Horia* is HORIINAE, and ZONITINAE and NEMOGNATHINAE are its junior subjective synonyms.

6. In the extensive literature on this family the name HORIINAE has been used only once (by Selander, 1991) as the name of the subfamily which includes but is not restricted to *Horia*, *Synhoria* and *Cissites*. This assemblage has been named ZONITINAE (e.g. Escherich, 1897; Wellman, 1910) or, much more commonly, NEMOGNATHINAE (e.g. Cockerell, 1910; Borchmann, 1917; Denier, 1935; Cros, 1940; Pardo Alcaide, 1950; Enns, 1956; Selander, 1964; Pinto & Selander, 1970; Bologna, 1991).

7. The beetle family-group name ZONITINAE Mulsant, 1857 is a homonym of the widely used gastropod name ZONITIDAE Mörch, 1864 (type genus *Zonites* Montfort, 1810; type species by original designation and monotypy *Helix algira* Linnaeus, 1758, p. 769). However, this homonymy is eliminated by mandatory correction of ZONITINAE Mulsant to ZONITIDINAE under Article 35d(i), since the correct family-group name based on the feminine generic name *Zonitis* Fabricius is ZONITIDINAE (from *Zonitis*, genitive Zonitidos); the name based on the masculine generic name *Zonites* is ZONITINAE (from *Zonites*, genitive Zonitos) (see Appendix D of the Code, Table 2, Part B, cases 17, 20). Entomologists have never used the spelling ZONITIDINAE. The only use of a family-group name based on *Zonitis* among recent authors was by MacSwain (1956), Kaszab (1956, 1959, 1969) and Bologna (1983).

With these exceptions there has been complete acceptance of the name NEMOGNATHINAE for the past 80 years (e.g. Borchmann, 1917; Denier, 1935; Cros, 1940; Pardo Alcaide, 1950; Enns, 1956; Selander, 1964; Gupta, 1978; Bologna, 1991).

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to rule that the family-group names MELOIDAE Gyllenhal, 1810 and other family-group names based on *Meloe* Linnaeus, 1758 and NEMOGNATHINAE Castelnau, 1840 and other family-group names based on *Nemognatha* Illiger, 1807 are to be given precedence over HORIIDAE Latreille, 1802 and other family-group names based on *Horia* Fabricius, 1787 whenever they are considered to be synonyms;

(2) to place on the Official List of Generic Names in Zoology the following names:
  (a) *Meloe* Linnaeus, 1758 (gender: masculine), type species by subsequent designation by Latreille, 1810, *Meloe proscarabaeus* Linnaeus, 1758;
  (b) *Nemognatha* Illiger, 1807 (gender: feminine), type species by monotypy *Zonitis vittata* Fabricius, 1801;
  (c) *Horia* Fabricius, 1787 (gender: feminine), type species by subsequent designation by Betrem, 1929, *Horia fabriciana* Betrem, 1929;
  (d) *Zonitis* Fabricius, 1775 (gender: feminine), type species by subsequent designation by Selander, 1987, *Zonitis flava* Fabricius, 1775;

(3) to place on the Official List of Specific Names in Zoology the following names:
  (a) *proscarabaeus* Linnaeus, 1758, as published in the binomen *Meloe proscarabaeus* (specific name of the type species of *Meloe* Linnaeus, 1758);
  (b) *vittata* Fabricius, 1801, as published in the binomen *Zonitis vittata* (specific name of the type species of *Nemognatha* Illiger, 1807);
  (c) *fabriciana* Betrem, 1929, as published in the binomen *Horia fabriciana* (specific name of the type species of *Horia* Fabricius, 1787);
  (d) *flava* Fabricius, 1775, as published in the binomen *Zonitis flava* (specific name of the type species of *Zonitis* Fabricius, 1775);

(4) to place on the Official List of Family-Group Names in Zoology the following names:
  (a) MELOIDAE Gyllenhal, 1810 (type genus *Meloe* Linnaeus, 1758), with the endorsement that it and other family-group names based on *Meloe* are to be given precedence over HORIIDAE Latreille, 1802 and other family-group names based on *Horia* Fabricius, 1787 whenever they are considered to be synonyms;
  (b) HORIIDAE Latreille, 1802 (type genus *Horia* Fabricius, 1787), with the endorsement that it and other family-group names based on *Horia* are not to be given priority over MELOIDAE Gyllenhal, 1810 and other family-group names based on *Meloe* Linnaeus, 1758 or NEMOGNATHINAE Castelnau, 1840 and other family-group names based on *Nemognatha* Illiger, 1807 whenever they are considered to be synonyms;
  (c) NEMOGNATHINAE Castelnau, 1840 (type genus *Nemognatha* Illiger, 1807), with the endorsement that it and other family-group names based on *Nemognatha* are to be given precedence over HORIIDAE Latreille, 1802 and other family-group names based on *Horia* Fabricius, 1787 whenever they are considered to be synonyms;

(d) ZONITIDINAE Mulsant, 1857 (type genus *Zonitis* Fabricius, 1775) (correct original spelling of ZONITINAE);

(5) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name ZONITINAE Mulsant, 1857 (incorrect original spelling of ZONITIDINAE).

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Case 3046

Papilio sylvanus Esper, [1779] (currently known as *Ochlodes venata* or *Augiades sylvanus*; Insecta, Lepidoptera): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of *Papilio sylvanus* Esper, [1779] (currently known as *Ochlodes venata* or *Augiades sylvanus*) for the Large Skipper (family HESPERIIDAE), one of the commonest butterflies in Europe and widely distributed throughout the Palaearctic. The species was known exclusively as *sylvanus* for more than 150 years, mostly in the combination *Augiades sylvanus*. The name is formally a junior primary homonym of *Papilio sylvanus* Drury, 1773, in use for the past 150 years as *Anthene sylvanus* for a West African hairtail butterfly (family LYCAENIDAE). The two species have not been considered congeneric since *Papilio* was used for all butterflies in the 18th century. The name *Ochlodes venata* (Bremer & Grey, 1853) has been used for *P. sylvanus* Esper in recent decades but this relates to a separate species from China.

Keywords. Nomenclature; taxonomy; Lepidoptera; butterflies; HESPERIIDAE; LYCAENIDAE; skippers; hairtails; *Augiades sylvanus*; *Ochlodes sylvanus*; *Ochlodes venata*; *Anthene sylvanus*.

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1. Drury (1773, p. 5, pl. 3, figs. 2 and 3) described and figured *Papilio sylvanus*, a hairtail butterfly from Sierra Leone (family LYCAENIDAE). The species was one of those included in his new genus *Anthene* by Doubleday (1847, p. 27) and it has been known as *Anthene sylvanus* since then (see, for example, the recent publications of Stempffer, 1967, p. 194; D'Abrera, 1980, p. 528, pl. 528; Berger, 1981, p. 299, pl. 207, figs. 32-35; Kielland, 1990, p. 207, pl. 53; and Ackery, Smith & Vane-Wright, 1995, p. 627). The species is distributed in forests from Senegal and Sierra Leone to Zaire and east to Uganda and western Tanzania. The usage of *sylvanus* Drury has never been challenged.

2. *Papilio sylvanus* Esper, [1779] (p. 343, pl. 36, suppl. 12, fig. 1) was described from Germany (see Heppner, 1981, for the dates of publication of the parts of Esper's work). The specific name *sylvanus* was used for more than 150 years for one of the more common butterflies, known in English as the Large Skipper (family HESPERIIDAE), which is found throughout the Palaearctic region, from western Europe to the easternmost limits of Asia (see, for example, Staudinger, 1871, p. 35; Mabille in Seitz, [1906], p. 347, pl. 88a; and Frohawk, [1924], p. 182, pl. 58).

3. Until the late 18th century all butterflies were classed in *Papilio*; this followed the usage of Linnaeus (1758, p. 458) who, however, divided *Papilio* into several 'phalanges'. Skippers, including *P. sylvanus* Esper, were placed in *Hesperia* by

Fabricius (1793, pp. 258, 326) and in the family HESPERIIDAE by Latreille (1809, pp. 189, 207); this was raised to a superfamily HESPERIOIDEA by Comstock & Comstock (1904), and skippers are in many ways distinct from all other butterflies. Species such as *P. sylvanus* Drury were placed in the family LYCAENIDAE by Leach (1814, p. 135). The names *sylvanus* Drury and *sylvanus* Esper relate to totally different taxa which have not been considered congeneric for 200 years, or confamilial since the early 19th century; there has never been any confusion between them.

4. Hemming (1934a, p. 39) noticed that *Papilio sylvanus* Esper, [1779] was a junior primary homonym of *P. sylvanus* Drury, 1773, and stated that the oldest available name for the species was *Hesperia venata* Bremer & Grey, 1853 (p. 61), which was based on a Chinese taxon. At the same time *H. venata* was placed in the genus *Ochlodes* Scudder, 1872; the previous usage of *Augiades* Hübner, [1819] was based on an incorrect type species designation (see Hemming, 1934b, p. 160). Hemming (1934c, p. 99) proposed the replacement subspecific name *alexandra* for the principal European subspecies *sylvanus sylvanus*, whilst Verity (1934, p. 13) proposed the name *esperi*. In the same year Hemming (1934d, p. 200) cited his combination *O. venata alexandra* but otherwise neither Hemming's nor Verity's replacement names for *sylvanus* Esper has ever been used.

5. In 1949 Evans (pp. 350 352) revised the taxonomy of the species *Ochlodes venata* and established the following subspecific divisions and synonymies:

O. venata venata (Bremer & Grey, 1853)
O. venata hyrcana (Christoph, 1893)
O. venata similis (Leech, 1893)
O. venata sagitta Hemming, 1934 [a replacement name for *O. venata sylvanoides* (Leech, 1893), a junior secondary homonym in *Ochlodes* of *Hesperia sylvanoides* Boisduval, 1832]
O. venata faunus (Turati, 1905)
= *sylvanus* Esper, [1779]
= *alexandra* Hemming, 1934
= *esperi* Verity, 1934.

The subspecies *hyrcana*, *similis* and *faunus* were reported to have slight differences in the characters of their genitalia from the others. Since Evans's (1949) work the European taxon has been known as *Ochlodes venata faunus* (Turati, 1905) (see, for example, Higgins & Riley, 1983, p. 339; Bridges, 1988, part 1, p. 196, part 2, p. 38) although the name *Augiades sylvanus* (Esper) has also appeared in many guides and lists (see, for example, Bergmann, 1952, p. 468, pl. 62; Döring, 1955, p. 65; Pulkkinen, 1956, p. 44, pl. 18; Tuleshkov, 1958, p. 99; Alberti, 1965, p. 658; Alberti, 1969, p. 144; Koch, 1984, p. 168, pl. 13). There are also numerous regional faunal lists in the former USSR using the name *sylvanus*.

6. I am at present in the course of a revision of the *Ochlodes venata* group. It is clear that the name *Ochlodes venata* as used by Evans (1949) represents a complex of species of which two, the trans-Palaearctic *Ochlodes sylvanus* (Esper) and east Asiatic *O. venata* (Bremer & Grey), are sympatric in the Far East. The differences in phenotype and genitalia are constant and thus Evans's (1949) taxonomic, and hence nomenclatural, arrangement cannot be maintained.

7. *Ochlodes sylvanoides* (Leech, 1893, p. 604, pl. 41, fig. 4; = *sagitta* Hemming, 1934b, p. 199) was described from Ta-Tsien-lu in southwest China. A study of the type material of this taxon in the Natural History Museum, London, shows that it is definitely distinct from, although related to, *O. venata*. Three other subspecific names putatively available for use for the European (and trans Palaearctic) species are also more than likely to represent distinct taxa. *O. hyrcana* (Christoph, 1893, p. 87) is almost entirely confined to northern Iran and is strongly suspected to be a separate species as no transitions to *O. sylvanus*, found in neighbouring localities, are known (see Alberti, 1974, pp. 82–83 and Häuser, 1982). *O. similis* (Leech, 1893, p. 605, pl. 41, fig. 6) was described from Mou-Pin in southwest China and is almost, if not fully, sympatric with *O. sagitta*; its type is quite different from both the latter and *O. sylvanus*, suggesting another separate species. Examination of the original description and photograph of the type of *O. faunus* (Turati, 1905, p. 36, pl. 6, figs. 5–9, pl. 7, fig. 3), described from Gavarnie in the east Pyrenees, shows that it might well be a different taxon from *O. sylvanus*. The type of *O. faunus* has unfortunately been entirely destroyed by pests and thus cannot be checked (see Nekrutenko, 1993).

8. The use of the specific name of *Ochlodes venata* (Bremer & Grey, 1853), which represents a distinct east Asian species, is taxonomically no longer appropriate for the trans-Palaearctic Large Skipper butterfly (para. 6 above). Adoption for the latter of any one of the names which has been used for a subspecies of *O. venata* (para. 5) would lead to confusion (the species has never been known by such a name) and instability (the nominal taxon may prove to be a separate species; see para. 7). Final clarification of the taxonomic status of the nominal subspecies is a long-term project which requires considerable amounts of material from inaccessible localities. Neither of the replacement names proposed by Hemming (1934) and Verity (1934) has ever been adopted in the literature. The specific name *sylvanus* Esper, [1779] was in universal usage without ambiguity until 1934 (a period of more than 150 years) and has continued to be used by some authors. It represents a well-known and widespread taxon. As mentioned in para. 3 above, *Papilio sylvanus* Drury and *P. sylvanus* Esper are placed in different families, indeed superfamilies, and have been for very many years. To introduce a yet further name (such as *alexandra* Hemming or *esperi* Verity) for the Palaearctic species would cause unnecessary confusion and would render a disservice to all those with an interest in butterflies; such a nomenclatural change would affect those working in applied fields (ecology and conservation, for example) as well as taxonomists. I therefore propose that the specific name of *Ochlodes sylvanus* (Esper, [1779]) be conserved.

9. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to rule that the specific name *sylvanus* Esper, [1779], as published in the binomen *Papilio sylvanus*, is not invalid by reason of being a junior primary homonym of *Papilio sylvanus* Drury, 1773;

(2) to place on the Official List of Specific Names in Zoology the following names:
   (a) *sylvanus* Drury, 1773, as published in the binomen *Papilio sylvanus*;
   (b) *sylvanus* Esper, [1779], as published in the binomen *Papilio sylvanus*, ruled in (1) above to be not invalid by reason of being a junior primary homonym of *Papilio sylvanus* Drury, 1773.

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Case 3009

Polyrhachis Smith, 1857 (Insecta, Hymenoptera): proposed precedence over *Myrma* Billberg, 1820

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Abstract. The purpose of this application is to conserve the generic name *Polyrhachis* Smith, 1857 for a prominent Old World and Australasian ant genus (family FORMICIDAE) by giving it precedence over the senior subjective synonym *Myrma* Billberg, 1820, which has been sometimes used for a subgenus of *Polyrhachis*. The genus *Polyrhachis* includes about 500 species and subspecies, found mostly in the tropics and sub-tropics but a few species extend the range northwards into Japan, Korea, central China and the Middle East.

Keywords. Nomenclature; taxonomy; Hymenoptera; FORMICIDAE; ants; *Polyrhachis*; *Myrma*.

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1. *Myrma* Billberg, 1820 (p. 104) was established for two African species, *Formica militaris* Fabricius, 1781 (p. 493) and *F. carinata* Fabricius, 1804 (p. 413), and the putative new species *Myrma hystrix*. However, the latter is a nomen nudum because there was no description, illustration or previous bibliographic reference. There was no description of the genus. Billberg's work was published as a catalogue which was considered by some of his contemporaries as only the privately printed listing of a personal collection. However, Walsingham & Durrant (1902, p. 163) noted: 'From general appearance the book would appear to have been properly published, and has been accepted as published by those who have dealt with it'. They analysed the work and commented (p. 170): 'We have been unable to discover a single genus which can be accepted as valid'. In his *Index Animalium*, Sherborn (1922, p. xxiv) noted: 'I agree with Walsingham & Durrant ... as to this [Billberg's] book' and (1928, p. 4232) listed *Myrma* as a nomen dubium. Nevertheless *Myrma* is an available name under Article 12b(5) of the Code. In his description of *Formica militaris*, Fabricius referred to 'Mus. Dom. Banks'; a female specimen in the collections of the Natural History Museum, London, was identified as the holotype by Bolton (1973, p. 313).

2. The name *Polyrhachis* was first suggested for a group of ants recognised by Shuckhard (in Swainson & Shuckhard, 1840, p. 172). However, these authors did not distinguish the genus or assign species to it so that the name is not available with this authorship and date.

3. *Polyrhachis* Smith, 1857 (p. 58) was established with *Formica bihamata* Drury, 1773 (p. 73 and index, pl. 38, figs. 7 and 8) designated as the type species. The dates of publication of vols. 1–20 of the *Journal of the Proceedings of the Linnean Society* were set out by Kappel (1896); pages 41–88 of vol. 2, which included the first half of Smith's publication and the name *Polyrhachis*, were issued on 2 November 1857. Smith recognised 20 Asian species. Seventeen were described as new, and three, including *Polyrhachis carinata* (Fabricius), were new combinations, the taxa having been previously placed in *Formica* Linnaeus, 1758. The following year Smith (1858) recognised 54 Indo-Australian and African *Polyrhachis* species, including those of his 1857 paper. Twenty four were described as new, and 10, including *Polyrhachis militaris* (Fabricius) and *Polyrhachis sexspinosa* (Latreille, 1802), were new combinations, the taxa formerly being included in *Formica*.

4. During the 51-year period 1859 to 1910, 371 additional new taxa were established in *Polyrhachis*. They were proposed by the following 16 authors: Forel (112 names), Emery (98), Smith (63), Mayr (49), Roger (13), André (10), Santschi (9), Bingham (3), Stitz (3), Lowne (2), Norton (2), Walker (2), Wheeler (2), Dahl (1), Karavaiev (1) and Gerstäcker (1). Most of the names were first published in combination with *Polyrhachis*. One was first published in *Hoplomyrmus* Gerstäcker, 1858, a genus synonymised with *Polyrhachis* by Mayr (1863, p. 446). An estimated 425 available names for taxa were thus assigned to *Polyrhachis* by 1911, and *Polyrhachis* was universally accepted as their appropriate generic placement. Some of these species were by then prominent in scientific publications. In 1911 an additional 42 new names for taxa were proposed in combination with *Polyrhachis* separately by Forel, Emery and Stitz.

5. Wheeler (1911a, p. 858) discussed Billberg's (1820) paper. He designated (p. 859) *Formica militaris* Fabricius, 1781 as the type species of *Myrma* Billberg, 1820, and listed *Polyrhachis* Smith, 1857 as a junior subjective synonym of *Myrma*. He cited the subgeneric combination *Myrma* (*Polyrhachis*), established the new subgenera *Myrma* (*Campomyrma*) and *Myrma* (*Hagiomyrma*), and proposed the new combinations *Myrma bihamata* (Drury, 1773) and *Myrma carinata* (Fabricius, 1804). Wheeler (1911b, p. 170) again cited *Polyrhachis* as a subgenus of *Myrma*, and in 1912 (p. 90) stated that *Formica sexspinosa* Latreille (1802) 'is a *Myrma* (*Polyrhachis*)'.

6. Forel (1915, pp. 106–107) vigorously rejected Wheeler's nomenclature. He proposed that the priority of the name *Myrma* over *Polyrhachis* should not be recognised, and claimed support from the prominent specialists Emery and Santschi. Forel (1915) used *Polyrhachis* repeatedly at generic rank, cited the subgeneric combination *Polyrhachis* (*Myrma*) and described six further new subgenera in *Polyrhachis* (see para. 7 below). Subsequently, and without explanation, Wheeler (1915, pp. 821–823) abandoned his (1911) nomenclatural position by citing *Campomyrma* as a subgenus of *Polyrhachis* in the combination *Polyrhachis* (*Campomyrma*) *longipes* Wheeler. Following this he consistently used *Polyrhachis* at generic rank in all his relevant papers (Wheeler, 1919, 1922, 1927, 1935). Fourteen subgenera,

including the nominotypical one, had been assigned to *Polyrhachis* prior to 1935 (see para. 7 below). Wheeler cited 11 of these in *Polyrhachis*, and used the combination *Polyrhachis* (*Myrma*) in four papers (Wheeler, 1919, 1922, 1927, 1935).

7. After 1912 several authors used the subgeneric combinations *Polyrhachis* (*Myrma*), *Polyrhachis* (*Campomyrma*) and *Polyrhachis* (*Hagiomyrma*), attributing them to Wheeler. Fifteen additional new names were subsequently published as subgenera of *Polyrhachis*. With the exception of *Myrma*, none of these has ever been used at generic rank, and *Myrma* has been so used only by Billberg (1820) and Wheeler (1911a, 1911b, 1912), as recorded in paras. 1 and 5 above.

8. Following discussion and rejection of Wheeler's (1911) actions, Hung (1967, pp. 396–398) treated *Polyrhachis* as having priority over *Myrma*. He recommended that *Myrma* should be treated as a junior synonym, together with all 17 other names for subgenera within *Polyrhachis* (see para. 7 above). Hung considered that recognition of *Myrma* as the valid name for the genus 'would cause nomenclatorial chaos, not only for the 500 species directly involved, but also elsewhere in the classification of the family Formicidae'.

9. Subsequent authors have consistently used *Polyrhachis* as the name for the genus and, where relevant, have cited *Myrma* either as a junior synonym or as a subgenus of *Polyrhachis*. They include Mann (1916), Wilson & Taylor (1967), Brown & Taylor (1970), Brown (1973), Bolton (1973, 1974, 1975, 1994, 1995), Low & Terrill (1974), Taylor (1976, 1986, 1987, 1989, 1991), Greenslade (1979), Starr (1981), Bellas & Hölldobler (1985), Taylor & Brown (1985), Kohout (1987, 1988a, 1988b, 1988c, 1989, 1990, 1994a, 1994b, 1997 in press), Dorow & Maschwitz (1990, 1992), Dorow, Maschwitz & Rapp (1990), Hölldobler & Wilson (1990), Kohout & Taylor (1990), Andersen (1991), Wang & Wu (1991), Maschwitz & Dorow (1993), Dorow (1995) and Dorow & Kohout (1995).

10. Two recent catalogues have confirmed *Polyrhachis* to be one of the world's largest ant genera. Bolton (1995) listed 806 available names for taxa included in *Polyrhachis* (478 as current species, 162 as subspecies and 166 as junior synonyms); Dorow (1995) recognised 466 species (not including subspecies and junior synonyms). With the few exceptions mentioned above, all of these species-group names were first proposed in *Polyrhachis*, and all subsequent taxonomic acts involving them were performed using *Polyrhachis* as the generic name.

11. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to give the name *Polyrhachis* Smith, 1857 precedence over the name *Myrma* Billberg, 1820 whenever the two are considered to be synonyms;

(2) to place on the Official List of Generic Names in Zoology the following names:
   (a) *Polyrhachis* Smith, 1857 (gender: feminine), type species by original designation *Formica bihamata* Drury, 1773, with the endorsement that it is to be given precedence over the name *Myrma* Billberg, 1820 whenever the two names are considered to be synonyms;
   (b) *Myrma* Billberg, 1820 (gender: feminine), type species by subsequent designation by Wheeler (1911) *Formica militaris* Fabricius, 1781, with the endorsement that it is not to be given priority over the name *Polyrhachis* Smith, 1857 whenever the two names are considered to be synonyms;

(3) to place on the Official List of Specific Names in Zoology the following names:
(a) *bihamata* Drury, 1773, as published in the binomen *Formica bihamata* (specific name of the type species of *Polyrhachis* Smith, 1857);
(b) *militaris* Fabricius, 1781, as published in the binomen *Formica militaris* (specific name of the type species of *Myrma* Billberg, 1820).

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Case 3034

Waagenoconcha Chao, 1927 and *Gruntoconcha* Angiolini, 1995 (Brachiopoda): proposed conservation

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Abstract. The purpose of this application is to conserve the names of the Permian productide brachiopod genus *Waagenoconcha* Chao, 1927 and of its subgenus *Gruntoconcha* Angiolini, 1995. These nominal taxa are considered to include *Productus abichi* Waagen, 1884; the original designation of this as the type species of *Septoproductus* Frech, 1911 formally causes *Septoproductus* to be a senior synonym of *Waagenoconcha* and *Gruntoconcha*. However, the description of *Septoproductus* (based on Chinese material) as having the unusual feature of a strong ventral median septum would exclude *P. abichi* (from Pakistan) and indicates that this unused name is a junior synonym of *Tschernyschewia* Stoyanov, 1910. The suppression of *Septoproductus* is proposed.

Keywords. Nomenclature; taxonomy; Brachiopoda; *Gruntoconcha*; *Septoproductus*; *Tschernyschewia*; *Waagenoconcha*; Permian.

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1. Frech (1911, p. 132) established *Septoproductus* as a subgenus of *Productus* Sowerby, 1814. Frech based *Septoproductus* on Permian material from Lo-ping, south China, stressing the presence of a strong ventral median septum in specimens from both Lo-ping and the high Permian of Dzhulfia (Armenia). He went on to say that he had never been able to find a ventral median septum in comparable specimens from the Salt Range (Pakistan), and that the latter should be distinguished from the Chinese material; despite this, he designated *Productus abichi* Waagen, 1884 (p. 697), which was described from the Salt Range, as the type species of *Septoproductus*! This strange selection of the type species is the more peculiar in that Frech commented (p. 133) that the name *P. serialis* Waagen, 1884 (p. 700) should be used for the Salt Range specimen, rather than *P. abichi*, although Waagen had remarked 'it is with much doubt that I introduce this species [*P. serialis*] ... the shells are on the whole very similar to *Prod. abichi*'.

2. *Productus abichi* was described in detail and illustrated (pl. 74, figs. 1–7) by Waagen (1884); he wrote that 'the interior characters of this species are well known to me', yet he neither mentioned nor illustrated any sign of a ventral internal median septum. Grant (1966) redescribed and illustrated *P. abichi* but also did not report such a septum.

3. *P. abichi* is well known, and has been placed by various authors in *Waagenoconcha* Chao, 1927 (p. 85, type species by original designation *P. humboldti* d'Orbigny, 1842 (p. 54; from the Lower Permian of Bolivia). Muir-Wood & Cooper

(1960, pl. 89) used *P. abichi* as part of their illustrations of *Waagenoconcha*, on which they based a subfamily, and Grant (1966) based his discussion of *Waagenoconcha* on this species.

4. Frech (1911, footnote on p. 132) commented that there was a possible synonymy between his subgenus *Septoproductus* and *Tschernyschewia* Stoyanov, 1910 (p. 853, type species by original designation *T. typica*, sp. nov.), and this synonymy (based on the description of *Septoproductus*, rather than the type species *P. abichi*) was accepted by Muir-Wood (1965, p. 461) in the *Treatise on Invertebrate Paleontology*. Species of *Tschernyschewia* are highly septate in the ventral valve, much as described by Frech for *Septoproductus*.

5. Angiolini (1995, p. 206) established *Gruntoconcha* as a subgenus of *Waagenoconcha*, with the new species *W.* (*Gruntoconcha*) *macrotuberculata* (p. 206, fig. 16.6) from the Karakoram Range designated as the type species; she included *W. abichi* (Waagen, 1884) in the subgenus.

6. From the above it is seen that from its description *Septoproductus* Frech, 1911 is a junior synonym of *Tschernyschewia* Stoyanov, 1910, but that the original designation of *Productus abichi* as the type species formally causes it to be a senior subjective synonym of *Waagenoconcha* Chao, 1927 and of *Waagenoconcha* (*Gruntoconcha*) Angiolini, 1995. The name *Septoproductus* has not been used, and no species has ever been allocated to the genus (other than *P. abichi* in the original publication). It is desirable to retain the current understanding and use of *Waagenoconcha* and *Gruntoconcha*, and the placing of *P. abichi* therein, and this course is proposed in the forthcoming relevant volume of the *Treatise on Invertebrate Paleontology*.

7. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the name *Septoproductus* Frech, 1911 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the following names:
   (a) *Gruntoconcha* Angiolini, 1995 (gender: feminine), type species by original designation *Waagenoconcha* (*Gruntoconcha*) *macrotuberculata* Angiolini, 1995;
   (b) *Waagenoconcha* Chao, 1927 (gender: feminine), type species by original designation *Productus humboldti* d'Orbigny, 1842;

(3) to place on the Official List of Specific Names in Zoology the following names:
   (a) *macrotuberculata* Angiolini, 1995, as published in the binomen *Waagenoconcha* (*Gruntoconcha*) *macrotuberculata* (specific name of the type species of *Gruntoconcha* Angiolini, 1995);
   (b) *humboldti* d'Orbigny, 1842, as published in the binomen *Productus humboldti* (specific name of the type species of *Waagenoconcha* Chao, 1927);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Septoproductus* Frech, 1911, as suppressed in (1) above.

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Comment on the proposed conservation of the specific and subspecific names of *Trigonocephalus pulcher* Peters, 1863 [recte 1862] and *Bothrops albocarinatus* Shreve, 1934 (Reptilia, Serpentes) by the designation of a neotype for *T. pulcher* (Case 2921; see BZN **54**: 35–38)

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I am writing to ask the Commission not to take the action proposed by Schätti & Smith. There are gaps in the literature cited by the proposers, and they do not mention publications which are crucial in understanding the case.

In the following I present evidence that the specific name *almawebi* Schätti & Kramer, 1993 (see para. 4 of the application) is a junior subjective synonym of *campbelli* Freire, 1991, that the latter is the valid name for the western, terrestrial pitviper concerned in this case, and that there is no 'universal usage' (para. 6 of the application) of the specific name *pulcher* Peters, 1862 (not 1863 as stated in the application: see Bauer et al., 1995).

Freire (1991) described two new pitviper species. A terrestrial pitviper from near Huagal, Cantón Pallatanga, Province of Chimborazo, Ecuador, was described as *Bothrops campbelli*, and a (presumably arboreal) pitviper from the same locality was named *B. osbornei*. The male holotype of *B. campbelli* Freire, 1991 is deposited in the herpetological collection of the Instituto Nacional de Higiene y Medicina Tropical 'Leopoldo Izquieta Pérez' in Guayaquil, Ecuador (catalogue no. INHMT 1956). Photographs of the holotype and a topotype were published by Campbell & Lamar (1992, p. 12). Colour slides of the holotype and topotypes are kept in the slide collections of the University of Texas (Arlington Collection of Vertebrates, catalogue nos. 15543, 15544–45), the herpetological slide collection of the Senckenberg Museum, and my private slide collection. A detailed redescription of the holotype and five topotypes of *B. campbelli*, as well as the holotype of *Trigonocephalus pulcher* Peters, 1862, is in preparation (U. Kuch, unpublished manuscript).

Doubts as to the validity, and availability, of the name *Bothrops campbelli* Freire, 1991 arose soon after its publication (J.A. Campbell, in lit. 30 November 1991), and the name was subsequently considered a junior subjective synonym of a redefined *B. pulcher* by Campbell & Lamar (1992), to whom the holotype of *Trigonocephalus pulcher* Peters, 1862 had not been available. Campbell & Lamar (1992) also indicated that the legitimacy of Freire's (1991) publication could be challenged under Articles 8d and 9(3) of the Code, which require 'conventional printing' and outlaw 'photocopies as such'.

Schätti & Kramer (1993) discovered that the holotype of *T. pulcher* actually represented an arboreal pitviper of Amazonian Ecuador; they rejected the availability of Freire's publication and gave the new name *Porthidium almawebi* to the western species (see also Wüster et al., 1997 for a review of the nomenclatural history of *Bothrops campbelli*). They did not however present any evidence in favour of the rejection of Freire's paper.

Freire's (1991) description of two new snake taxa was issued publicly: it was obtainable free of charge from the publisher (Universidad Técnica de Machala,

Ecuador) or from the author. Schätti & Kramer (1993) suggested that Freire's work was a barely readable photocopy. However, an expert opinion (E. Schulz, in lit. 6 October 1996) confirms that the publication was produced by a conventional printing technique, probably offset printing; photocopies of the evaluation and of Freire (1991) are held by the Commission Secretariat. The work is to be regarded as published within the meaning of the Code, and the two names *Bothrops campbelli* Freire, 1991 and *B. osbornei* Freire, 1991 are available. In any event, for unknown reasons the descriptions of *B. campbelli* and *B. osbornei* were republished in a serial a year later (Freire, 1992).

Schätti & Kramer (1993) suggested that the Amazonian taxon was conspecific with a pitviper from Peru and Bolivia, presently known as *Bothriopsis* [*Bothrops* s. lat.] *oligolepis* (Werner, 1901). However, their conclusion was not based on a thorough analysis of geographical and non-geographical variation in these widely distributed snakes, or at least no such analysis was mentioned. Although the notion that these pitvipers are conspecific cannot at present be refuted, given their rarity in museum collections, it remains questionable whether many herpetologists will follow the taxonomic opinion of Schätti & Kramer (1993); see also Wüster et al. (1997). The hypothetical problem of a name change of *oligolepis* to *pulcher oligolepis* (para. 5 of the application) has no value as an argument in favour of the application by Schätti & Smith.

Schätti & Smith (para. 1) state that 'Subsequent authors have all followed Boulenger's (1896) usage and applied the specific name *pulcher* ... to a terrestrial species of pitviper found along the Pacific slopes of the Andes' and (para. 5) that '*pulcher* has never been used for the Amazonian species for which [W.] Peters (1863) proposed it.' This statement is incorrect. In fact, the usage of *pulcher* was until recently dubious, and inconsistent with known distributional patterns of Andean pitvipers. Two important points should be considered in this context, as follows.

First, the name *pulcher* has been used correctly for Amazonian pitvipers in the literature. Such important and widely used works as J.A. Peters (1960, p. 510), Klemmer (1963, p. 412), U.S. Navy Department Office of Naval Intelligence (1968, p. 61) and J.A. Peters & Orejas-Miranda (1970, p. 54) give the Amazonian lowlands in Ecuador and Peru as the range of *Bothrops pulcher*, thereby excluding the western species. Other, no less important, works give 'equatorial forests of Ecuador and Peru' as the geographical distribution of *B. pulcher* (Hoge, 1966, p. 132; Hoge & Romano, 1971, p. 257; Hoge & Romano Hoge, 1981, p. 218). 'Equatorial forests of Ecuador and Peru' (rather than Amazonian forests) might reflect some uncertainty of the latter authors as to the actual range limits of *B. pulcher*, because large parts of the two countries on both sides of the Andes are covered by forest. However, suitable habitat for the western species is unlikely to exist in Peru west of the Andes, except maybe in relictual forests near the Ecuadorian border, and indeed the species has not been found in Peru (Carrillo de Espinoza, 1983; Carillo de Espinoza & Icochea, 1995). Therefore, the above statements implicitly refer to Amazonian pitvipers. Original publications about these snakes are scarce, and none of the cited works includes a description of *B. pulcher*. However, in the absence of evidence to the contrary, and taking into account the citation of the original description (W. Peters, 1862) in these widespread and frequently used publications, I assume that the Amazonian species was correctly referred to as *Bothrops pulcher* whenever the geographical

distribution of the latter was stated to comprise the Amazonian lowlands of Ecuador and Peru.

Notable exceptions are J.A. Peters (1960) and J.A. Peters & Orejas-Miranda (1970). The original description of *Bothrops pulcher* is cited in these works (J.A. Peters even included the catalogue number of the *B. pulcher* holotype), while Boulenger (1896) is not, and an Amazonian distribution is indicated. However, the characters used for the identification of *pulcher* in both the key to the *Bothrops* species of Ecuador (Peters, 1960, pp. 508–509) and the *Bothrops* data matrix in Peters & Orejas-Miranda (1970, pp. 39–42) apply to the western species rather than to the Amazonian one. Thus, it remains uncertain whether J.A. Peters erroneously included data from western specimens when he prepared the account of the Amazonian species *pulcher*, or if he referred to the western species as *Bothrops pulcher*, and the stated Amazonian distribution was in error.

Secondly, Schätti & Smith state (para. 5) that 'the junior name *albocarinatus* [of Shreve, 1934] has been consistently applied to the [Amazonian] taxon since 1934.' This statement is in itself correct, but at least two other specific names have also been used during this period: *pulcher* (see above) and *alticolus* Parker, 1934. Since 1934 the names *albocarinatus* and *alticolus* have coexisted in the literature, mostly under *Bothrops* and *Bothriopsis*. In an unpublished Ph.D. thesis, Burger (1971) was the first to treat *alticolus* as a synonym of *albocarinatus*, which has a few months priority. Campbell & Lamar (1989, pp. 170–172) strongly suspected that the two names referred to a single species, and this view was confirmed by Schätti et al. (1990).

Schätti & Smith suggest (para. 6) that there is a 'universal usage' of *pulcher* and *albocarinatus*, but this is not the case. In fact, the Amazonian species represented by the holotype of *Trigonocephalus pulcher* Peters, 1862 is listed under all three names (*Bothrops albocarinatus*, *B. alticolus*, *B. pulcher*) in most of the major works on venomous snakes or influential regional checklists (e.g., Peters, 1960; Klemmer, 1963; Hoge, 1966; U.S. Navy Department Office of Naval Intelligence, 1968; Peters & Orejas-Miranda, 1970; Hoge & Romano, 1971; Hoge & Romano Hoge, 1981), and this 'triple nomenclature' was maintained in medical literature (Russell, 1979). Only in recent years has the use of *pulcher* been restricted to the western species; the first authors to do so explicitly were Campbell & Lamar (1989, 1992).

A list of 46 publications by 48 authors from 1862 to 1997 (based on the Systematic Index of *Zoological Record* and additional sources) that include any of the relevant names of this case (*pulcher*, *albocarinatus*, *alticolus*, *campbelli*, *almawebi*) is held by the Commission Secretariat. I have attempted to identify the species or the geographic origin of the snakes in these publications wherever possible, and come to the following conclusions. The name *pulcher* (under *Trigonocephalus*, *Lachesis*, *Bothrops*) was used for the Amazonian species in 5 cases, for the western species in 7 cases, for both species in 6 cases (undetermined: 15 publications). The name *albocarinatus* (under *Bothriechis*, *Bothriopsis*, *Bothrops*) was used for the Amazonian species in 23 cases (undetermined: 7). The name *alticolus* (under *Bothriechis*, *Bothriopsis*, *Bothrops*) was used for the Amazonian species in 17 cases (undetermined: 8). The name *campbelli* (under *Bothrops*) was used for the western species in 5 cases. The name *almawebi* (under *Porthidium*) was used for the western species in 3 cases (undetermined: 1).

In many of these publications, only the stated geographical distribution allowed a decision as to whether a particular name was used for the western or for the Amazonian species. The possibilty that authors might have referred to the western species while indicating an erroneous (Amazonian) distribution can therefore not be refuted. However, in the absence of evidence to the contrary, I regard the information contained in these works as correct and assume that the Amazonian species was actually referred to whenever an Amazonian distribution was given.

In much of the biomedical literature there is a serious problem in the identification of snakes and venoms; this is coupled with a lack of 'taxonomic awareness' among many biomedical researchers (see Wüster & McCarthy, 1996). Therefore, high priority should be given to the stability of the names of medically important species, so long as this is compatible with systematic and nomenclatural principles. Nevertheless, I feel that Schätti & Smith's remark 'stability is particularly important in the case of poisonous snakes' (para. 6) is too generalized a statement, because only a minority of venomous snakes is of toxinological or medical, let alone epidemiological, importance. The fact alone that a snake is venomous does not automatically call for a suspension of the strict application of the Code.

I have no knowledge of a single documented case of envenomation caused by either the western or the Amazonian species, and nothing is known of their venoms. Both species are secretive and rarely encountered in the field; according to Russell (1979) they do not belong to the clinically important pitvipers of the New World. Although these snakes must be regarded as potentially dangerous on account of their size, and may be capable of causing fatalities in humans, they are probably not of any public health significance.

Since 1947, the senior name *pulcher* Peters, 1862 has been correctly used at least four times as the valid name for the eastern (Amazonian) species; it has the junior subjective synonyms *albocarinatus* Shreve, 1934 and *alticolus* Parker, 1934. The western species has the valid specific name *campbelli* Freire, 1991, of which *almawebi* Schätti & Kramer, 1993 is a junior subjective synonym.

In conclusion, no action by the International Commission on Zoological Nomenclature is required in this case.

Acknowledgements

I am grateful to Stefanie Hornig, Konrad Klemmer, Gunther Köhler, Otto Kraus, William W. Lamar, Steven D. Werman, and Wolfgang Wüster for valuable discussion and helpful suggestions on this comment.

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Comment on the proposed conservation of the specific names of *Hydrosaurus gouldii* Gray, 1838 (currently *Varanus gouldii*) and *Varanus panoptes* Storr, 1980 (Reptilia, Squamata) by the designation of a neotype for *H. gouldii*

(Case 3042; see BZN **54**: 95–99)

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I am writing in support of the proposal by Dr R.G. Sprackland, Prof H.M. Smith and Dr P.D. Strimple for the conservation of the specific names of *Varanus gouldii* (Gray, 1838) and *V. panoptes* Storr, 1980.

I believe that their case was very well put and their suggested solution would be of great benefit in clarifying what is currently an awkward matter. I have written a number of scientific papers and one book on members (*Varanus gouldii*, *V. panoptes* and *V. rosenbergi*) of what was formerly known as a single species, *V. gouldii*. In all of these I have followed the nomenclature of Cogger (1992) and feel this is

appropriate because of the almost universal acceptance of these specific names in their accustomed senses.

I believe that the confusion that has resulted from the publication by Böhme (1991), which was correct under the Code, in the naming of animals within this species complex would be solved by accepting the proposal of Sprackland et al. and that their suggested solution would meet with general approval by herpetologists. I fully support their suggested course of action.

Comments on the proposed conservation of the specific name of *Varanus teriae* Sprackland, 1991 (Reptilia, Squamata)
(Case 3043; see BZN **54**: 100–103)

(1) L.B. Holthuis

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I am much surprised to find in the *Bulletin* a request to conserve a name less than six years old by suppression of a synonym six years older. The application makes admirably clear that there is no doubt that *Varanus teriae* Sprackland, 1991 and *Odatria keithhornei* Wells & Wellington, 1985 are objective synonyms as they both are based on the same holotype specimen. As far as I can see the only reason for suppression of the older name is that its publication was obscure, but through all the publicity it now receives, it is not so any longer. Of course it is to be regretted that the authors of the older name took so little trouble to publicise the results of their research; judging by the application their (1985a) publication is virtually unknown.

The facts that the two names were both availably published, that their synonymy is not in any doubt, and that this synonymy has existed for only six years, in my view make it entirely illogical that the older of the two names should be suppressed. In six years a name cannot become so generally accepted that its replacement would be a disaster.

The Commission should judge the case on its own merits, and not be influenced that the authors of the older name, Wells & Wellington, have previously been the subject of a nomenclatural controversy.

(2) R.G. Sprackland

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Professor Holthuis is opposed (above) to our application to conserve the specific name of *Varanus teriae* Sprackland, 1991 on the grounds that the name has been in

use for only six years. There are a number of criteria affecting the choice of name for the northeastern Australian tree monitor and, in our view, the six-year availability of *teriae* is the least significant of them.

1. The name *teriae* was published in 1991. However the name *Odatria keithhornei* Wells & Wellington, the senior synonym, was itself published only in 1985. Thus the choice is between a six-year-old name and one that is 12 years old.

2. The specific name *keithhornei* has not been used as valid since its publication and, indeed, was unrecognised until 1994 when Covacevich & Couper, compilers of the catalog of type material in the Queensland Museum, discovered that *keithhornei* had been based on the same specimen as *teriae*. They listed both names and recorded the synonymy but did not adopt either as valid.

3. The northeastern Australian tree monitor has consistently been referred to as *teriae* since publication of the name and, to our knowledge, it has appeared in at least 18 publications by 19 authors (para. 3 of the application). The name *teriae* has been recorded in *Zoological Record*, as have most of the publications in which it has been cited, whereas neither Wells & Wellington's (1985) paper nor the name *keithhornei* has ever been recorded. It would cause considerable ambiguity and serve no purpose to alter the name now. Some authors would follow the change whilst others would not, and any author unaware of the nomenclatural situation might well think that *teriae* and *keithhornei* referred to two separate taxa.

4. The name *teriae* has been used in legal documentation, both national and international, relating to conservation of the species (para. 3). For example, the taxon is referred to under this name in *The action plan for Australian reptiles* (1993), *World checklist of threatened amphibians and reptiles* (1993), and *Checklist of CITES species. A reference to the appendices to the International Trade in Endangered Species of Wild Fauna and Flora* (1996). To introduce now a name which is unknown for the taxon would be illogical and confusing and would bring potentially serious consequences.

5. In establishing *keithhornei*, Wells & Wellington (1985) referred to Czechura (1980) and thus the name is formally available under Article 13a(ii) of the Code (i.e. by bibliographic reference). Czechura, however, thought that he was announcing the first substantiated occurrence on mainland Australia of the New Guinea species *Varanus prasinus* (Schlegel, [1839]) and very few details of the taxon were given. Sprackland's (1991) work must be consulted as the original study giving a full description, including illustrations and an analysis of the taxon compared with other monitor lizards.

For all these reasons we stand by our application, believing it to be of sound merit, and commend it to the Commission.

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ASPIDIPHORIDAE Kiesenwetter, 1877 (1859) (Coleoptera) Op. 1862
CELAENIDAE Naef, 1922 (Cephalopoda) Op. 1860
HEMIDACTYLIINI Hallowell, 1856 (Amphibia, Caudata) Op. 1873
KELAENIDAE Naef, 1921 (Cephalopoda) Op. 1860
MONSTRILLIDAE Dana, 1849 (Copepoda) Op. 1869
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MYCETOGLOSSINI Bonaparte, 1850 (Amphibia, Caudata) Op. 1873
PLUTONIINAE Bollman, 1893 (Chilopoda) Op. 1880
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PLUTONIUMINAE Bollman, 1893 (Chilopoda) Op. 1880
SPHINDIDAE Jacquelin du Val, [1861] (Coleoptera) Op. 1862

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Agatachys Meigen, 1830 (Diptera) Op. 1881
Apterornis Owen, 1848 (Aves) Op. 1874
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Aspidiphorus Ziegler in Dejean, 1821 (Coleoptera) Op. 1862
Aspidophorus Agassiz, 1846 (Coleoptera) Op. 1862
Borborus Meigen, 1803 (Diptera) Op. 1863
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Cacoxenus Loew, 1858 (Diptera) Op. 1879
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Muensterella Schevill, 1950 (Cephalopoda) Op. 1860
Mycetoglossus Bonaparte, [1839] (Amphibia, Caudata) Op. 1873
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INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; manuscripts not prepared in accordance with these guidelines may be returned.

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